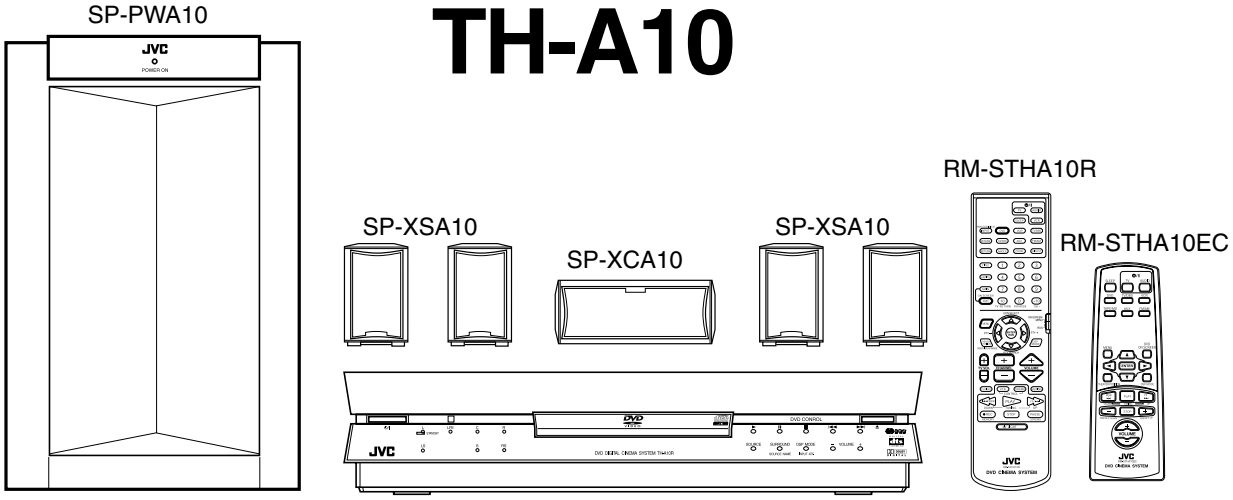
JVC

# SERVICE MANUAL

## DVD DIGITAL THEATER SYSTEM

# TH-A10R
# TH-A10




| Area Suffix TH-A10R | |
|---|---|
| B | U.K. |
| EN | Northern Europe |
| EE | Russia |

| Area Suffix TH-A10 | |
|---|---|
| E | Continental Europe |

| | | |
|---|---|---|
| TH-A10R TH-A10 | XV-THA10R (DVD player)/XV-TH-A10 | |
| | SP-THA10 (Speaker section) | SP-PWA10 (Powered subwoofer) |
| | | SP-XCA10 (Center speaker) |
| | | SP-XSA10 (Satellite speaker) x 4 |

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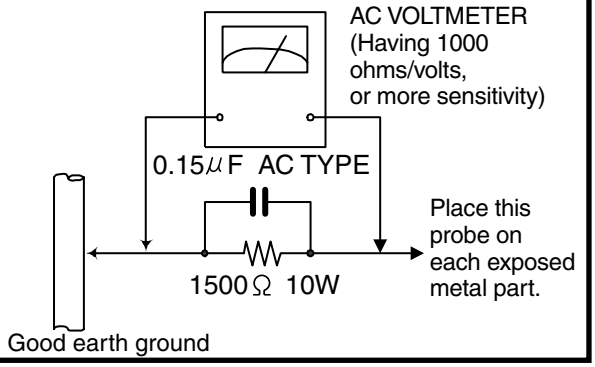
No.20872
Sep. 2000

## Safety precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer`s warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet , particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to eachexposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. voltage measured Any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).




## Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

# Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

## 1.1. Grounding to prevent damage by static electricity

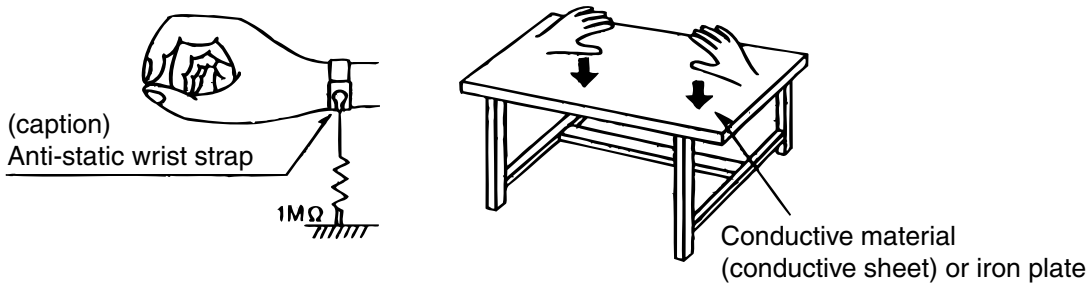
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players. Be careful to use proper grounding in the area where repairs are being performed.

### 1.1.1. Ground the workbench

1. Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

### 1.1.2. Ground yourself

1. Use an anti-static wrist strap to release any static electricity built up in your body.




### 1.1.3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

## 1.2. Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

3. Handle the flexible cable carefully as it may break when subjected to strong force.

4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

# Dismantling and assembling the traverse unit

## 1. Notice regarding replacement of optical pickup

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs to the optical pickup or connected devices.

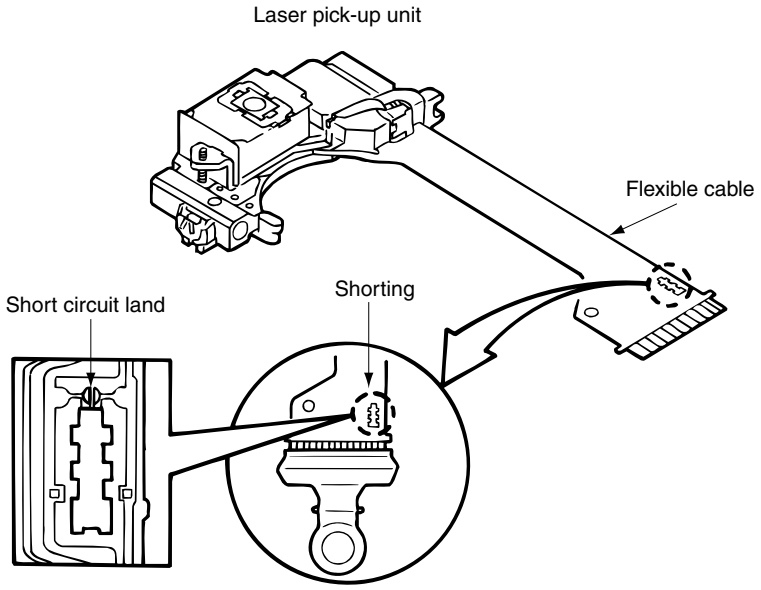
(Refer to the section regarding anti-static measures.)

1. Do not touch the area around the laser diode and actuator.

2. Do not check the laser diode using a tester, as the diode may easily be destroyed.

3. It is recommended that you use a grounded soldering iron when shorting or removing the laser diode.
   Recommended soldering iron: HAKKO ESD-compatible product

4. Solder the land on the optical pickup's flexible cable.
   - Note : Short the land after shorting the terminal on the flexible cable using a clip, etc., when using an ungrounded soldering iron.
   - Note : After shorting the laser diode according to the procedure above, remove the solder according to the text explanation.




Shot with the rclip

# Disassembly method

**<Main body>**

## ■Removing the top cover

**(See Fig.1 and 2)**

1. Remove the four screws A attaching the top cover (Use an Allen wrench).

2. Lift up the front part of the top cover to release the two joints a and remove the top cover toward the front.

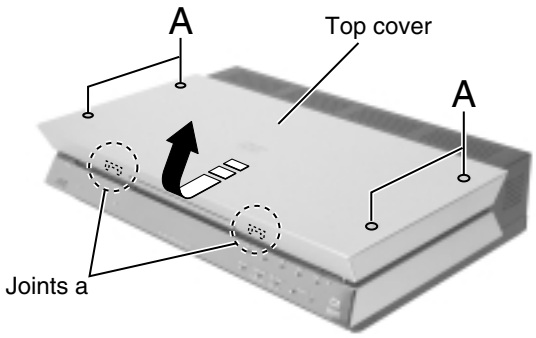



Fig.1

## ■Removing the rear cover (See Fig. 3)

・ Prior to performing the following procedure, remove the top cover.

1. Remove the four screws B attaching the rear cover on the back of the body. Pull out the rear cover backward.

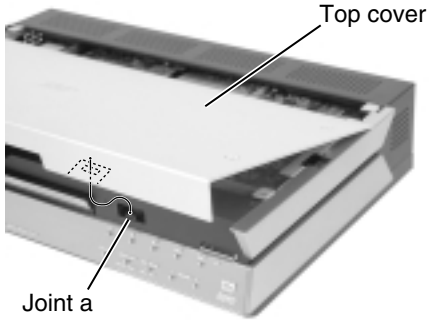



Fig.2

## ■Removing the right and left side covers

**(See Fig. 4 and 5)**

・ Prior to performing the following procedure, remove the top cover and the rear cover.

1. Move the left side cover backward to release the five joint hooks b and remove the left side cover outward.

2. Remove the right side cover in the same way.

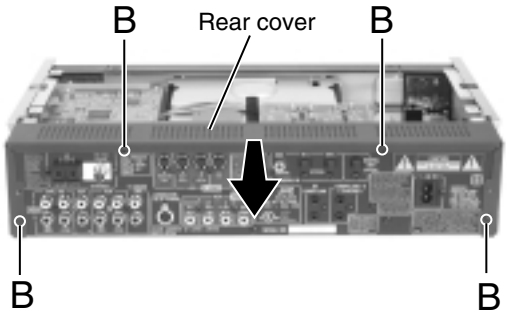



Fig.3

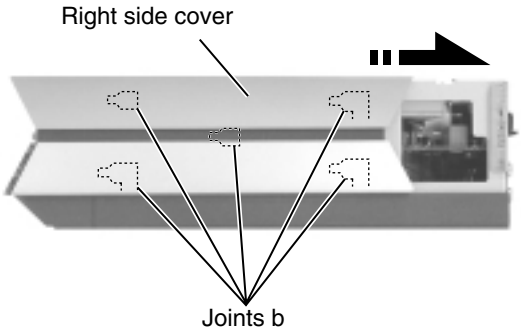



Fig.5

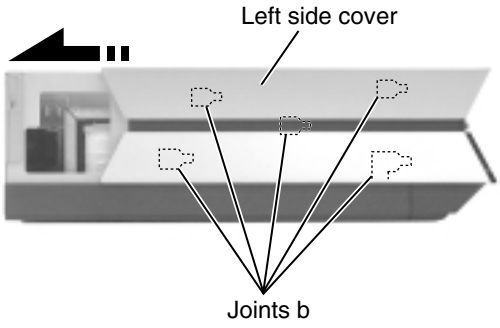



Fig.4

## ■Removing the front panel assembly (See Fig. 6 to 9)

・ Prior to performing the following procedure, remove the top cover, the rear cover and the side covers.

1. Disconnect the harness from connector CN802 on the main board on the upper side of the body.
2. Remove the two screws C on the upper side of the body.
3. Remove the three screws D on the bottom of the body.
4. Release the five joints c and detach the front panel assembly toward the front.

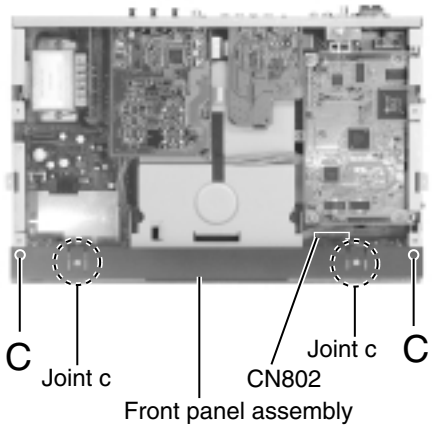



Fig.6

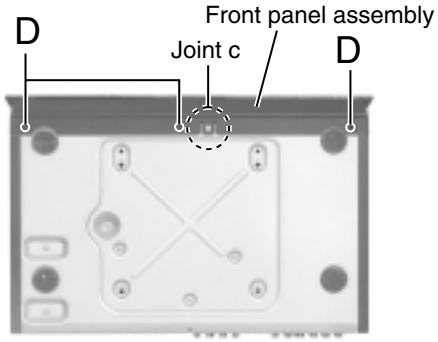



Fig.7

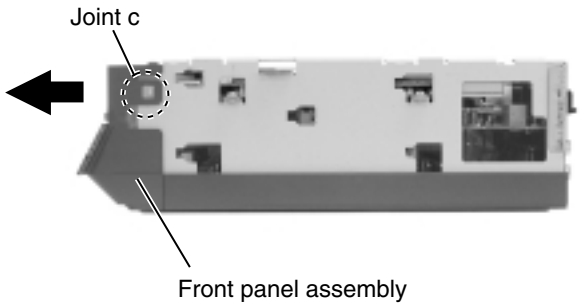



Fig.9

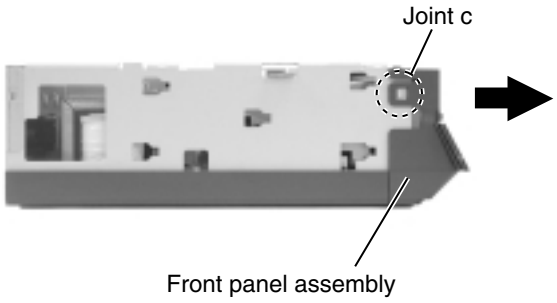



Fig.8

## ■Removing the right and left corner covers (See Fig.10 and 11)

- Prior to performing the following procedure, remove the top cover, the rear cover, the side covers and the front panel assembly.
- It is not necessary to remove the front panel assembly.

1. Move the left corner cover backward to release the three joint hooks d.
2. Remove the right corner cover in the same way.

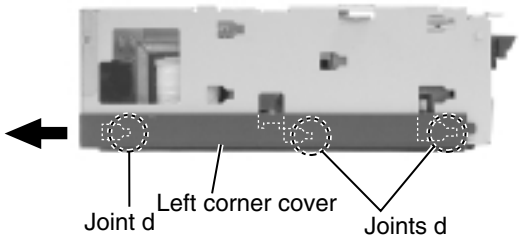



Fig.10

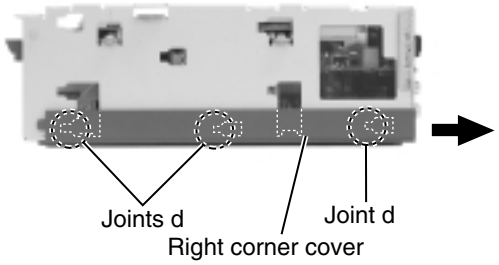



Fig.11

## ■Removing the rear panel (See Fig.12 to 14)

- Prior to performing the following procedure, remove the top cover and the rear cover.

1. Remove the eighteen screws E and the one screw F attaching the rear panel.
2. Release the two joints e on both sides of the body.

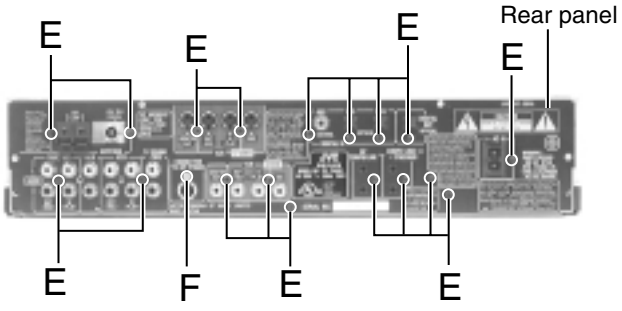



Fig.12

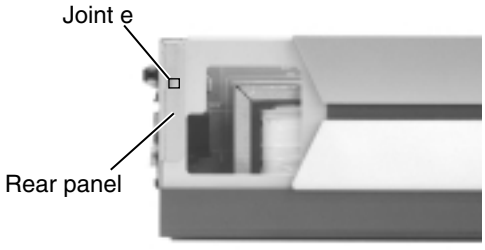



Fig.12

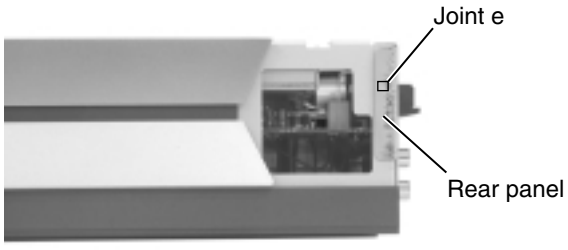



Fig.12

## ■Removing the DVD servo control board (See Fig.15 to 17)

・Prior to performing the following procedure, remcover and the right side cover.ove the top cover, the rear

1. Remove the three screws G and pull the DVD servo control board case upward.

2. Disconnect the harness from connector CN501 and CN503, and the card wire from CN101, CN103 and CN502 of the DVD servo control board on the underside of the DVD servo control board case.

3. Remove the four screws H attaching the DVD servo control board.

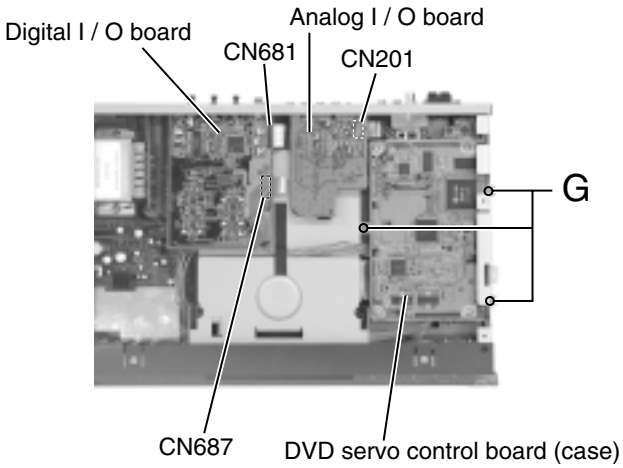



Fig.15

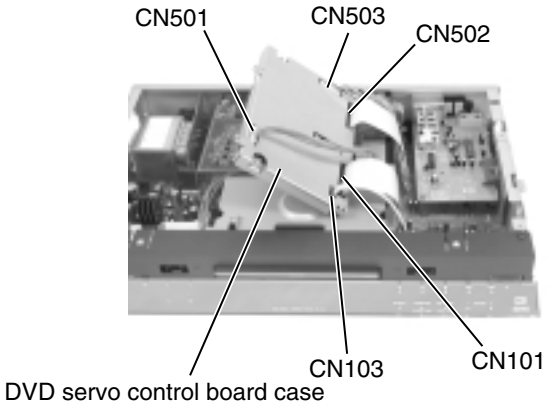



Fig.16

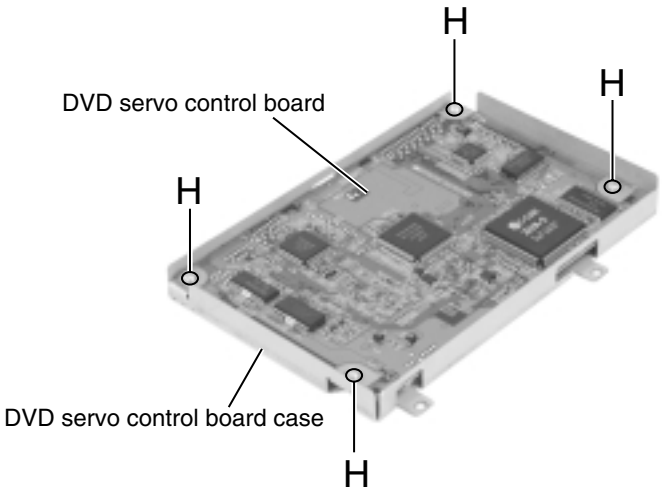



Fig.17

## ■Removing the analog I / O board / the digital I / O board (See Fig.18 and 19)

・ Prior to performing the following procedure, remove the top cover and the rear cover.

1. Remove the two screws E attaching the analog I / O board on the back of the body.
2. Disconnect the card wire from connector CN201 on the analog I / O board.
3. Remove the four screws E attaching the digital I / O board on the back of the body.
4. Disconnect the card wire from connector CN681 and CN687 on the digital I / O board.

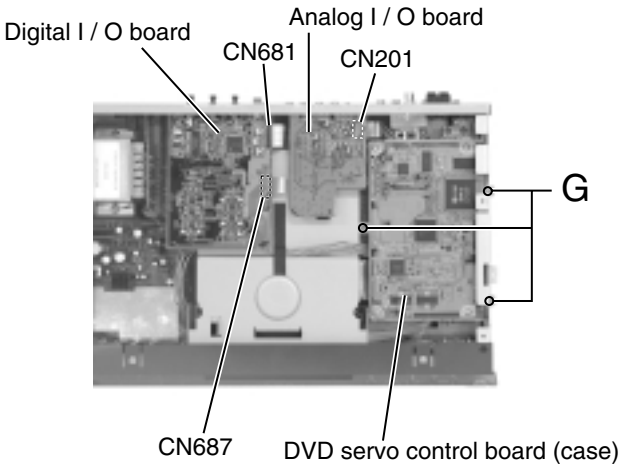



Fig.18

## ■Removing the tuner board / the sub board (See Fig.20 and 21)

・ Prior to performing the following procedure, remove the top cover, the rear cover and the DVD servo control board case.

1. Remove the two screws E attaching the tuner board on the back of the body.
2. Disconnect connector CN111 on the tuner board from the sub board.
3. Disconnect connector CN131 on the sub board from the main board.

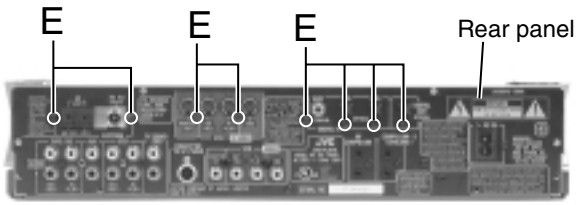



Fig.19

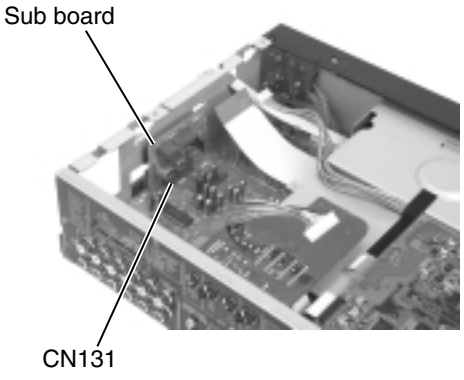



Fig.21

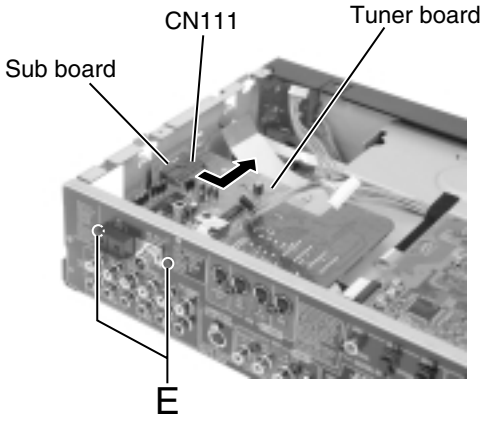



Fig.20

## ■Removing the DVD mechanism assembly (See Fig.22 and 23)

・Prior to performing the following procedure, remove the top cover, the rear cover, the front panel assembly, the DVD servo control board case, the analog I / O board, the digital I / O board and the tuner board.

1. Disconnect the harnesses from the spacer on the upper side of the DVD mechanism cover.
2. Remove the two screws I and the one screw J attaching the DVD mechanism cover.
3. Remove the two screws K attaching the DVD mechanism assembly.
4. Remove the DVD mechanism assembly upward while pulling it backward.

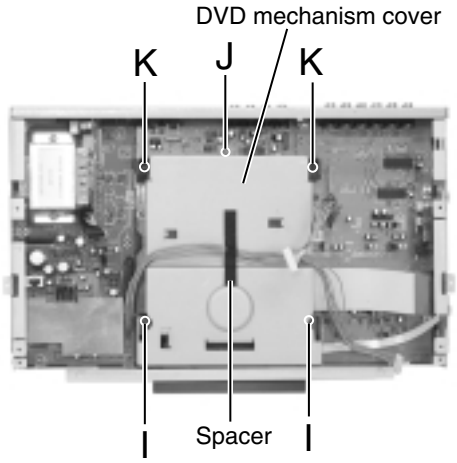



Fig.22

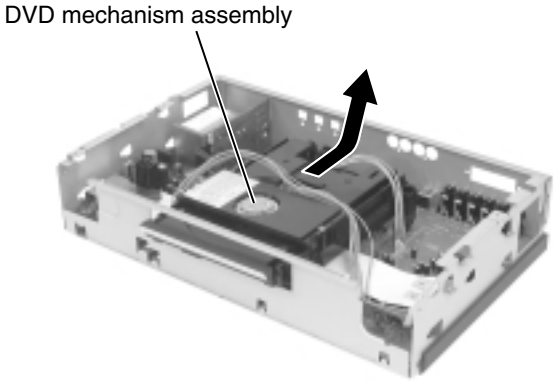



Fig.23

## ■Removing the power board (See Fig.24 and 25)

・Prior to performing the following procedure, remove the top cover, the rear cover, the front panel assembly, the DVD servo control board case and the digital I / O board.

1. Disconnect the harness from the spacer on the upper side of the DVD mechanism cover.
2. Remove the two screws E attaching the power board on the back of the body.
3. Disconnect the harness from connector CN911 and CN912 on the power board.
4. Remove the four screws L attaching the power board.
5. Disconnect connector CN913 and CN914 of the power board from the main board by pulling out them respectively.

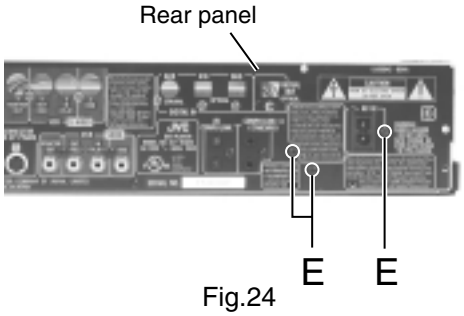



Fig.24

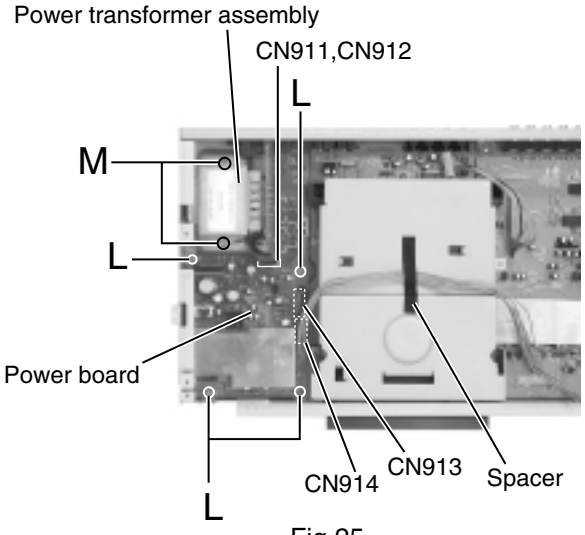



Fig.25

## ■Removing the power transformer assembly (See Fig.24 and 25)

・Prior to performing the following procedures, remove the top cover and the rear cover.

1. Disconnect the harnesses from connector CN911 and CN912 on the power board.
2. Remove the two screws M attaching the power transformer assembly.
3. Remove the screw E attaching the power transformer assembly on the back of the body.

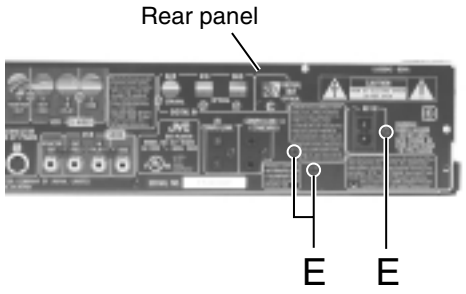


Fig.24

## ■Removing the main board (See Fig.26)

・Prior to performing the following procedure, remove the top cover, the rear cover, the front panel assembly, the rear panel, the DVD mechanism assembly, the power board and the sub board.

1. Remove the four DVD spacers on the upper side of the main board.
2. Remove the five screws N attaching the main board.

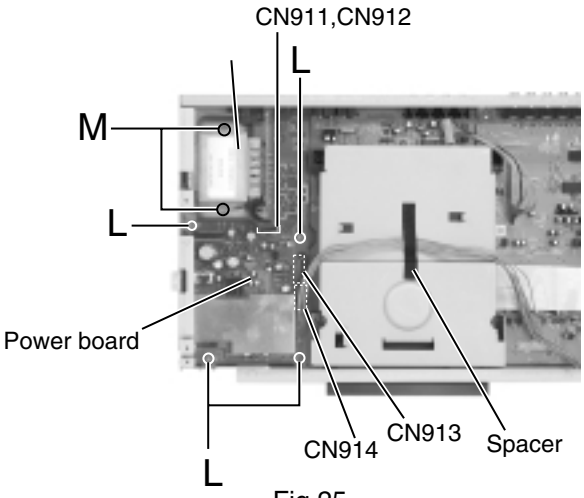


Fig.25

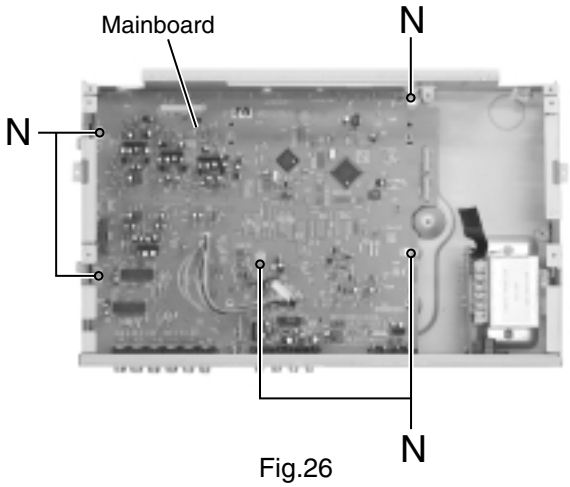


Fig.26

### <Front panel assembly>

・Prior to performing the following procedure, remove the top cover, the rear cover, the side covers and the front panel assembly.

## ■Removing the power switch board (See Fig.27)

1. Dithe harness from connector CN705 on the power switch board.sconnect
2. Remove the three screws O attaching the power switch board.

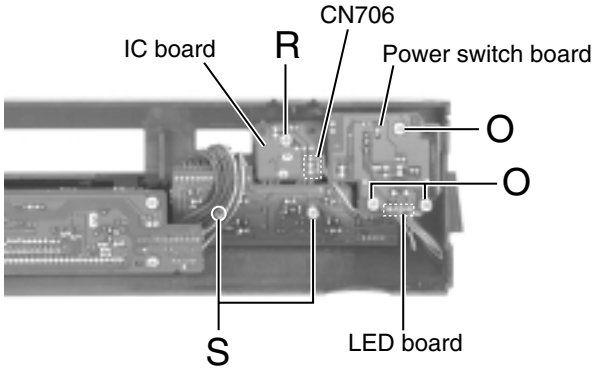


Fig.27

## ■Removing the eject board (See Fig.28)

1. Disconnect the harness from connector CN702 on the eject board.
2. Remove the three screws P attaching the eject board.

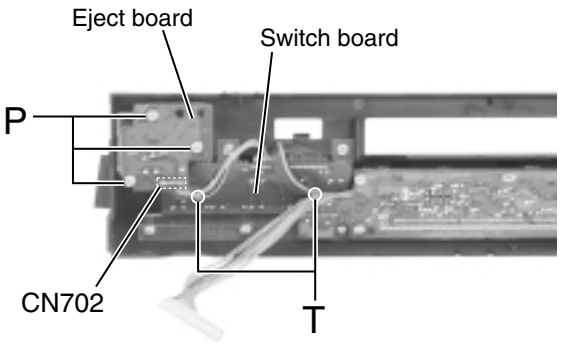



Fig.28

## ■Removing the LCD board (See Fig.29)

1. Remove the four screws Q attaching the LCD board.
2. Unsolder WA701, WA703 and WA704 on the LCD board.

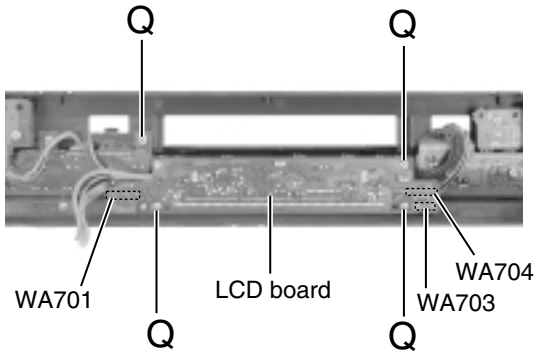



Fig.29

## ■Removing the IC board (See Fig.27)

1. Remove the screw R attaching the IC board.
2. Disconnect the harness from connector CN706 on the IC board.

## ■Removing the LED board (See Fig.27)

・Prior to performing the following procedure, remove the LCD board and the IC board.

1. Disconnect the harness from connector CN705 on the power switch board.
2. Remove the two screws S attaching the LED board.

## ■Removing the switch board (See Fig.28)

・Prior to performing the following procedure, remove the LCD board.

1. Disconnect the harness from connector CN702 on the eject board.
2. Remove the two screws T attaching the switch board.

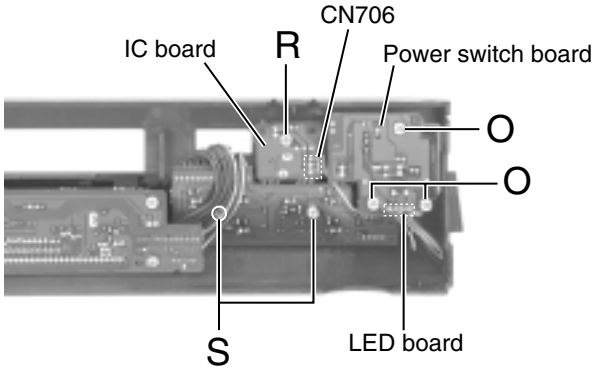



Fig.27

## <Removing DVD mechanism unit>

■ **Removing the clamper base** (refer to Figure 1)

o Remove the top cover.

o Remove the DVD mechanism unit.

1. Remove the two screws at A fixing the clamper base.

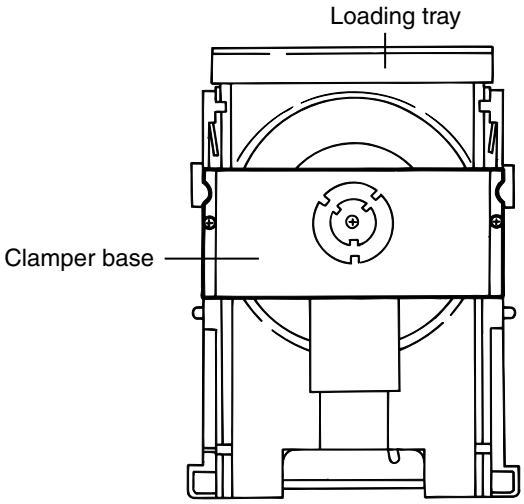



**Figure 1**

■ **Removing the loading tray** (refer to Figures 2 - 4)

o Remove the clamper base.

1. Turn the up-down cam lever clockwise (in the direction of the arrow in Figure 2) to lower the position of the mechanism.
2. Manually set the loading tray to the fully-open position.
3. Stretch the tray stoppers on both sides of the loading base outward and pull out the tray.

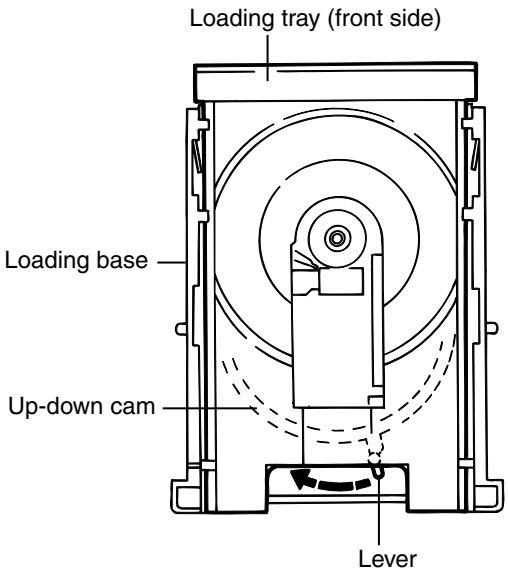



**Figure 2**

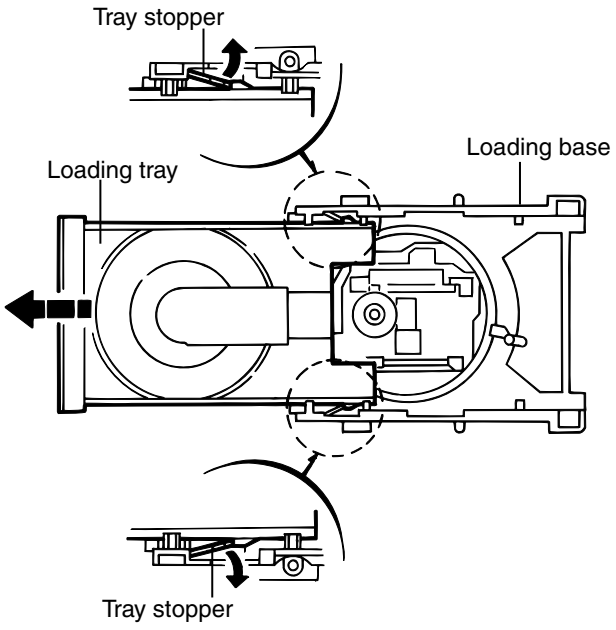



**Figure 4**

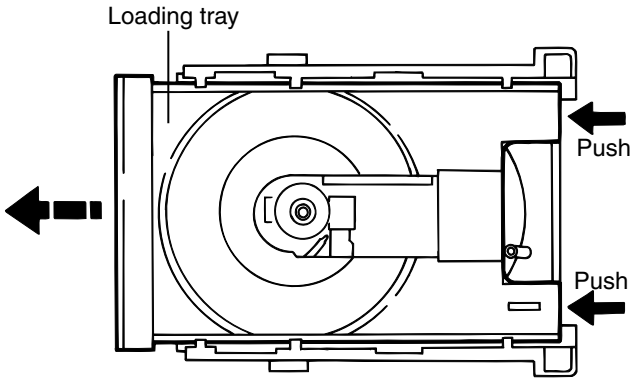



**Figure 3**

■ **Removing the traverse mechanism unit** (refer to Figure 5)

o Remove the loading tray.

1. Remove the three screws at B fixing the traverse mechanism unit.

■ **Protecting the optical pickup**

o Solder the flexible ground point on the optical pickup when replacing the pickup or before detaching the mechanism control board. When assembling the unit, remove the solder last.

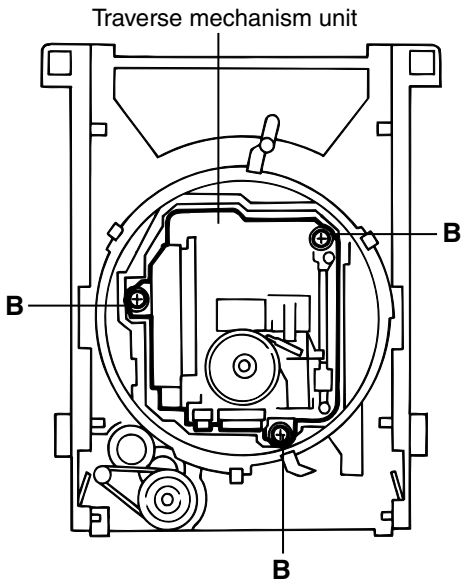



**Figure 5**

■ **Removing the mechanism control board** (refer to Figures 6 - 7)

o Remove the traverse unit. (Can be detached without detaching the T-mechanism unit.)

1. Remove the two screws at C fixing the mechanism control base from the bottom of the traverse unit.
2. Pull out the CN12 connector and detach the mechanism control board.
3. Remove the card wire from the CN13 connector on the mechanism control board.
4. Pull out the FPC holder from the CN12 connector on the reverse side of the mechanism control board and remove the flexible harness, referring to Figure 7.

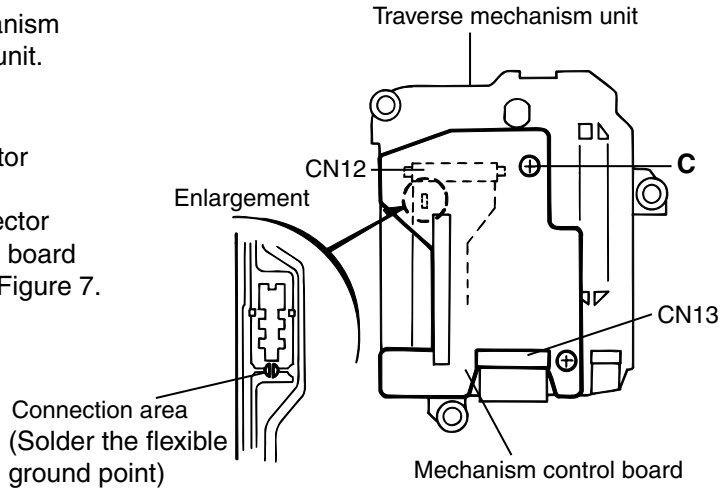



**Figure 6**

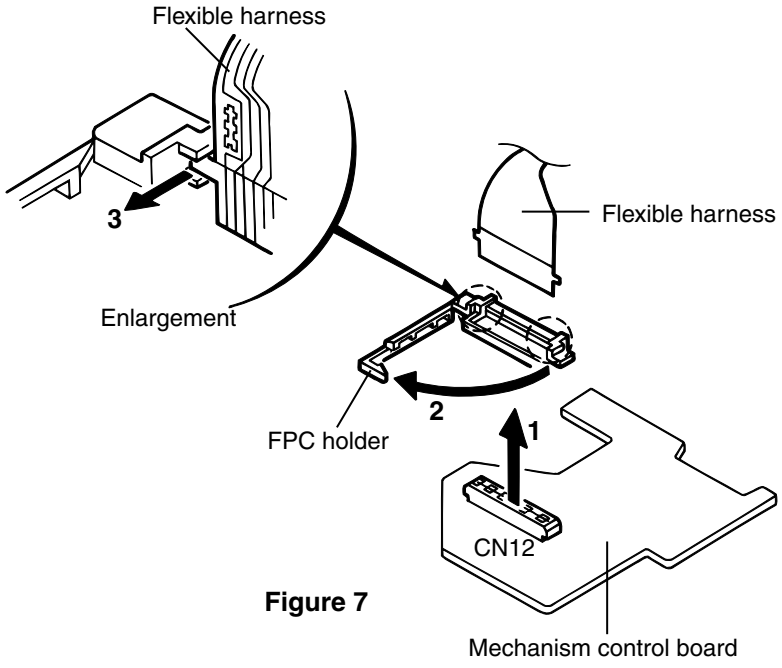



**Figure 7**

■ **Removeing the turntable and spindle motor assemby** (refer to Figures 8 - 9)

o Remove the traverse mechanism unit.
o Solder the flexible ground point on the optical pickup. (Figure 6)
o Remove the mechanism control board.

1. Remove the flexible harness from the feed motor connector on the spindle motor board assembly.
2. Remove the three screws at D fixing the spindle motor from the bottom of the traverse chassis.

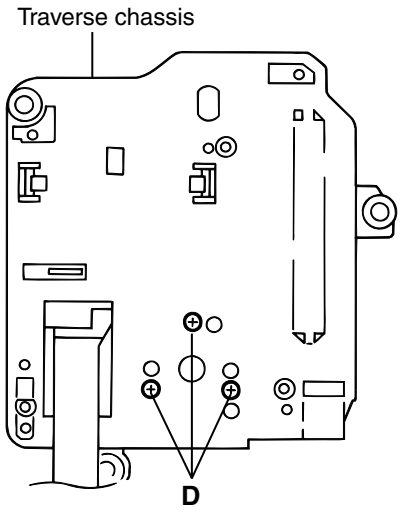



**Figure 8**

■ **Removing the feed motor unit** (refer to Figure 9)

o Remove the traverse mechanism unit.
o Remove the mechanism control board.

1. Remove the FPC from the feed motor connector on the turntable spindle motor board.
2. Remove the two screws at E fixing the feed motor unit.

■ **Removing the optical pickup unit** (refer to Figure 9)

o Remove the traverse mechanism unit.
o Remove the mechanism control board.
o Remove the feed motor unit.

1. Remove the screw at F fixing the guide shaft holder at B, then simultaneously remove the guide shaft at B and the optical pickup unit. While doing so, slide the unit horizontally away from the guide shaft at A.

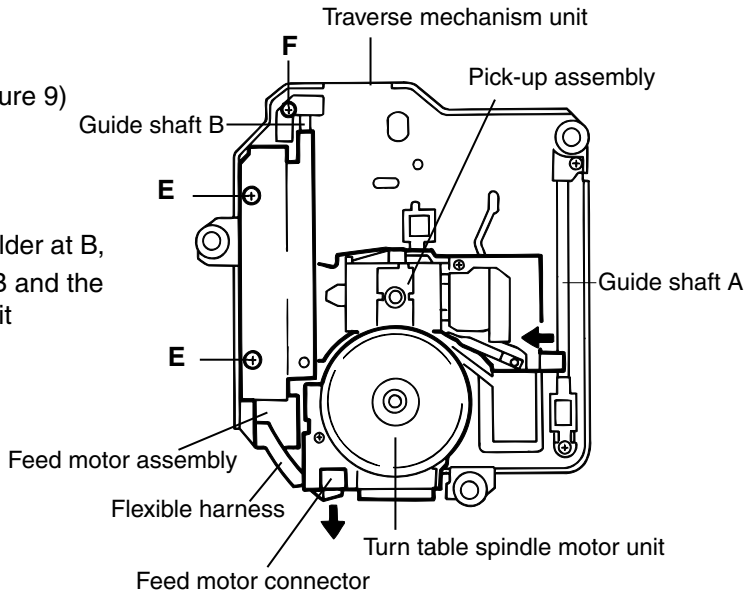



**Figure 9**

■ **Removeing the loading mechanism parts**
(refer to Figures 10 - 11)

o Remove the clamper base.

o Remove the disk tray.

1. Turn the lever counterclockwise until it stops (position 1), while pushing the switch lever in the direction of the arrow and pushing up the pawl at A using a screwdriver.
2. Stretch the two pawls at B outward using a screwdriver and remove the chassis.
3. Turn the lever clockwise (position 2) to remove the up-down cam.
4. Remove the pulley gear and the pulley gear belt after removing the screw at G fixing the pulley gear.
5. Pull out drive gear 2 then drive gear 1.

■ **Removing the loading motor board**
(refer to Figures 11 - 12)

o Remove the clamper base.

o Remove the disk tray.

1. Remove the loading belt.
2. Remove the two screws at H fixing the loading motor.
3. Remove the screw at I and the three pawls at C fixing the loading motor base from the reverse side of the loading base.

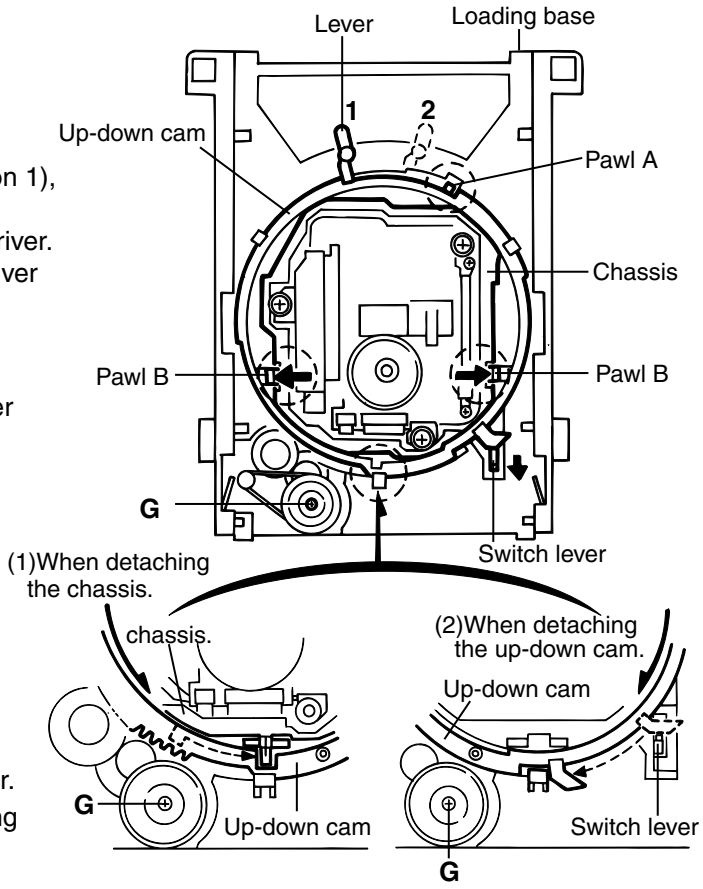



**Figure 10**

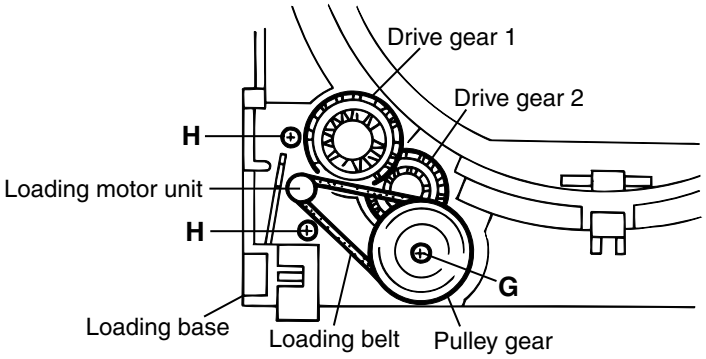



**Figure 11**

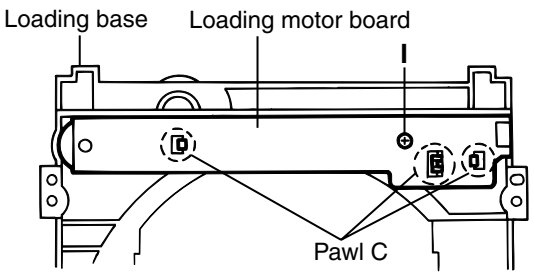



**Figure 12**

# Disassembly method

**<Speaker>**

## ■Removing the amplifier assembly (See Fig.1)

1. Remove the twelve screws A attaching the amplifier assembly on the back of the body.

2. Move the amplifier assembly backward and disconnect the harness from connector CN109 in the lower part of the amplifier assembly.

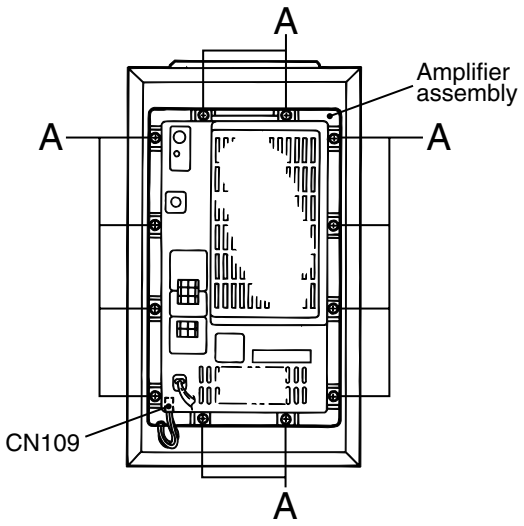


Fig.1

## ■Removing the heat sink cover and the amplifier cover (See Fig.2 and 3)

・ Prior to performing the following procedure, remove the amplifier assembly.

1. Pull out the volume knob.

2. Remove the four screws B attaching the heat sink cover.

3. Remove the twenty screws C and the one screw D attaching the amplifier cover.

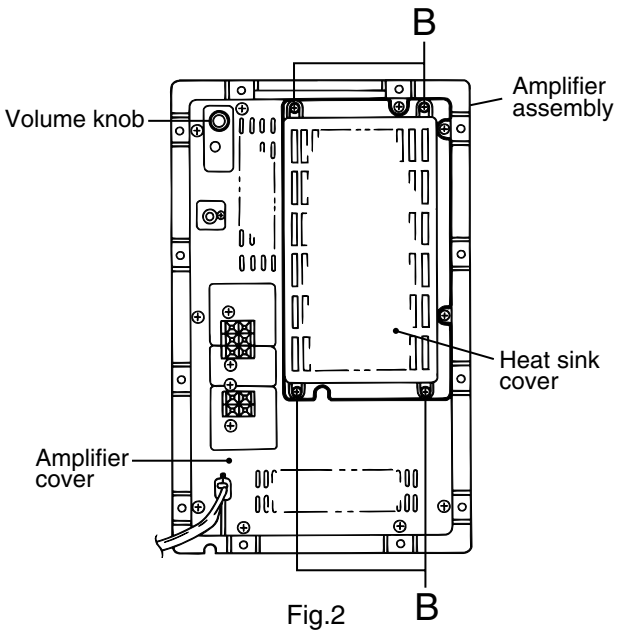


Fig.2

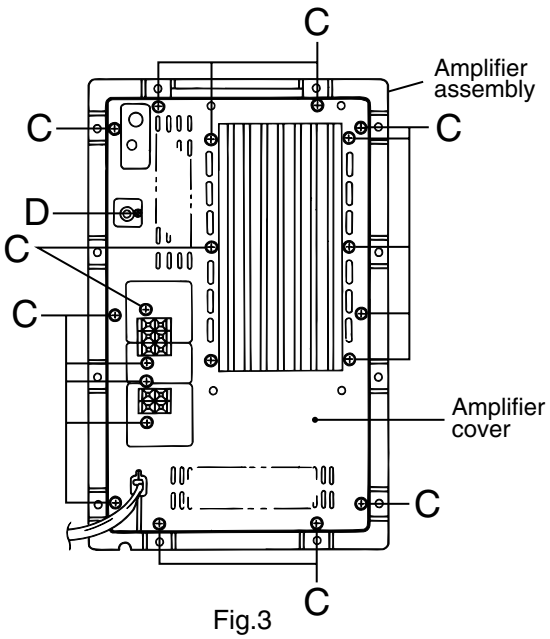


Fig.3

## ■Removing the front panel assembly (See Fig. 6 to 9)

・ Prior to performing the following procedure, remove the top cover, the rear cover and the side covers.

1. Disconnect the harness from connector CN802 on the main board on the upper side of the body.
2. Remove the two screws C on the upper side of the body.
3. Remove the three screws D on the bottom of the body.
4. Release the five joints c and detach the front panel assembly toward the front.

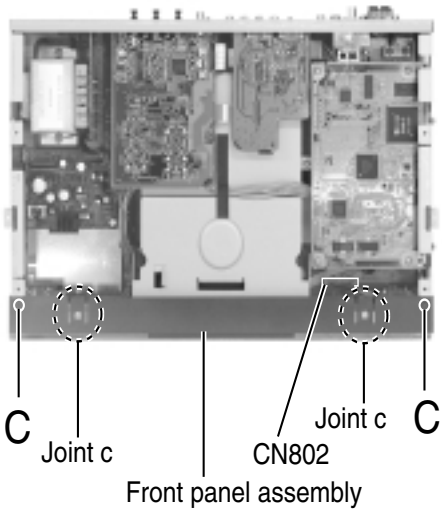



Fig.6

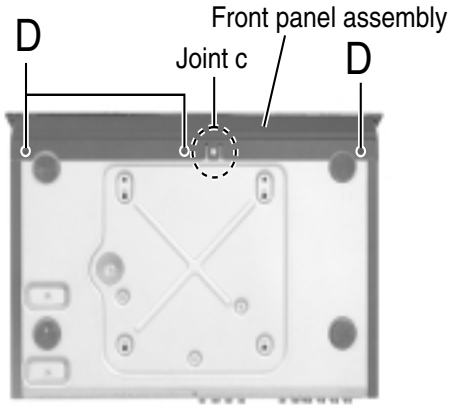



Fig.7

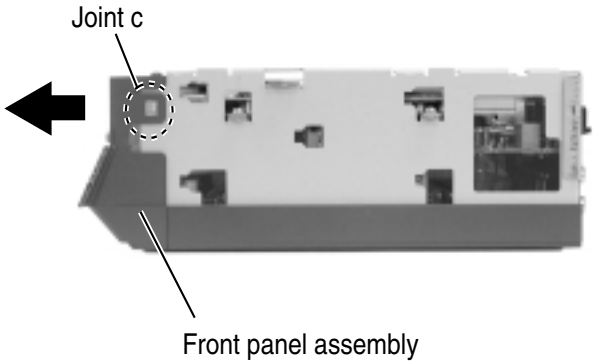



Fig.9

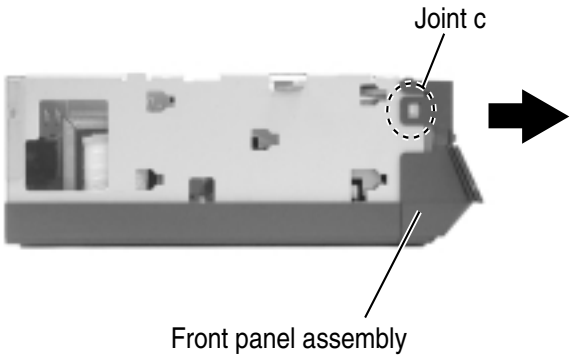



Fig.8

## ■Removing the right and left corner covers (See Fig.10 and 11)

- Prior to performing the following procedure, remove the top cover, the rear cover, the side covers and the front panel assembly.
- It is not necessary to remove the front panel assembly.

1. Move the left corner cover backward to release the three joint hooks d.
2. Remove the right corner cover in the same way.

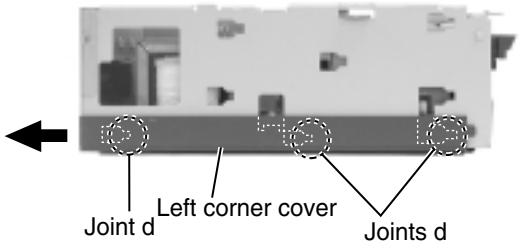



Fig.10

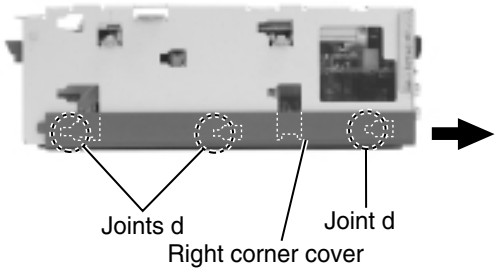



Fig.11

## ■Removing the rear panel (See Fig.12 to 14)

- Prior to performing the following procedure, remove the top cover and the rear cover.

1. Remove the eighteen screws E and the one screw F attaching the rear panel.
2. Release the two joints e on both sides of the body.

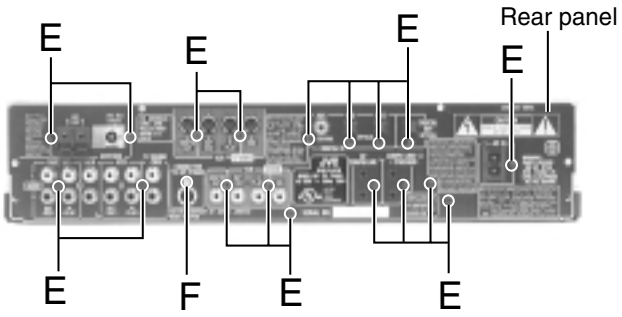



Fig.12

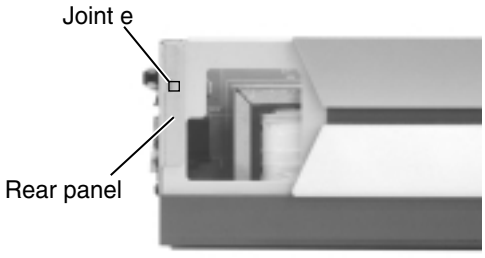



Fig.12

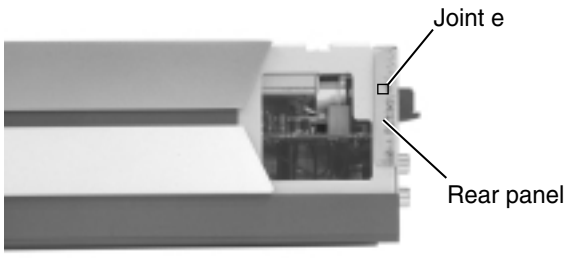



Fig.12

## ■Removing the DVD servo control board (See Fig.15 to 17)

・Prior to performing the following procedure, remcover and the right side cover.ove the top cover, the rear

1. Remove the three screws G and pull the DVD servo control board case upward.

2. Disconnect the harness from connector CN501 and CN503, and the card wire from CN101, CN103 and CN502 of the DVD servo control board on the underside of the DVD servo control board case.

3. Remove the four screws H attaching the DVD servo control board.

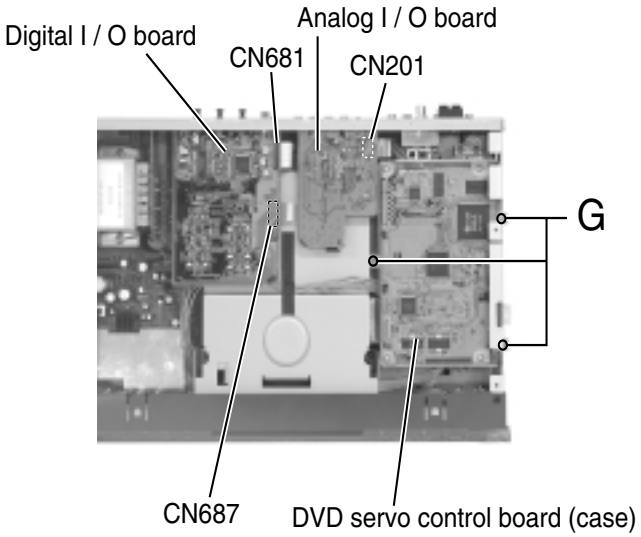



Fig.15

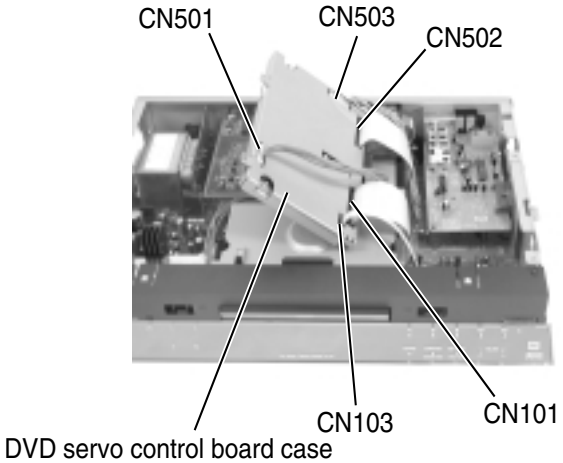



Fig.16

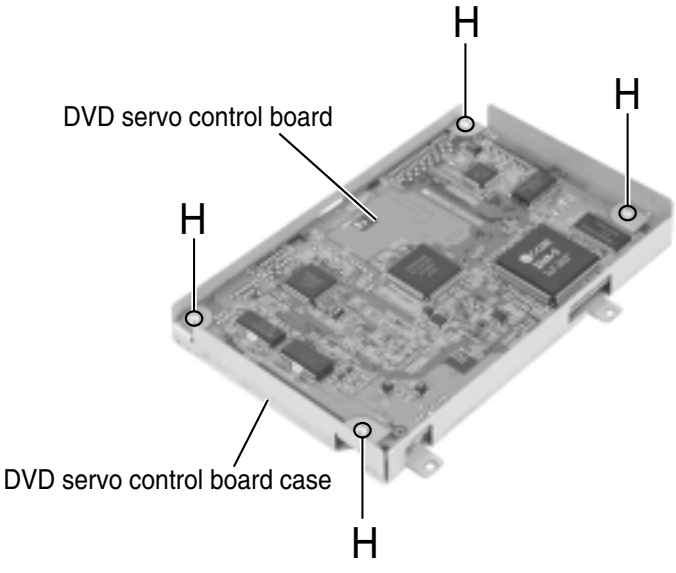



Fig.17

# Main Adjustment

Adjustment and confirmation matter

(1) Auto adjustment method

If microprocessor (IC401, IC402, IC714, IC716) or DVD Prek-up is replaced, initialize the DVD player in the following matter:

1. Initialize the DVD player in the following matter:

1) Make sure that no disc is on the tray.
2) Insert the power pulag to the outret while pressing "PLAY" and "OPEN/CLOSE" button at the same time.
FL Display indicate ¥ ; Region cord.
3) Press Enter button. And EEPROM initialize start.
4) When indicate "96kHz EEPROM" on the display , initialize finished.

**Note : During the EEPROM initialization the keys may not be operated.**
**Press the "POWER" key to initiate the STAND-BY mode and the test mode will then be cancelled.**

(2) Confirmation of DVD RF level

1.The oscilloscope is connected between "1"(RFOP) of CN104 and "2"(GND).

2.Reproduction of the test disc (VT-501) made by JVC.

3.It is confirmed that RF LEVEL is 350mVp-p±150mVp-p.

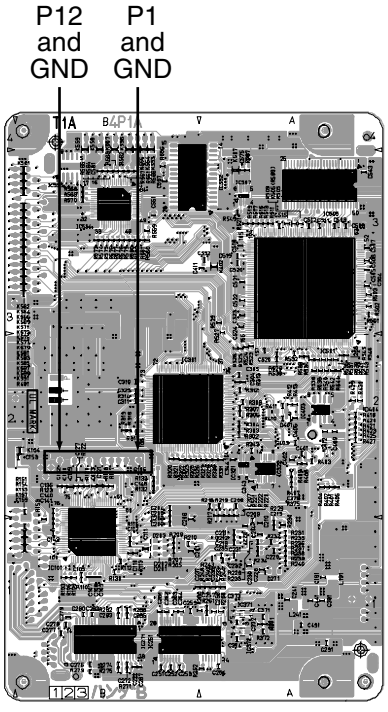
4.When there is disorder in the waveform road cuts etc, test disk is exchanged and measured.

(3) Confirmation of CD jitter level and RF level

1. The CD jitter meter is connected between "11"(GND) of CN104 and "12"(FLTOUT).
The RF level is observed at the same time.
2.The first test disk(CTS-1000) made of JVC is reproduced.

3.It is confirmed that RF LEVEL is 360±100mVp-p.

5. When there is disorder in the waveform road cuts etc, test disk is exchanged and measured.




DVD SERVO CONTROL PWB

FRONT SIDE

(4) Flap adjustment of the Pick-up guide shaft

1) Make sure that there is no disc on the tray.

2) Press both the "PLAY" and "OPEN/CLOSE" keys of the main unit to activate the primary power and ＊＊¥( ＊＊ ; Version3, ¥; Region cord) will be displayed on the FL indicator.

**Note: If the FL indicator display stops and remains at "TEST 0", unplug the power cord from the outlet and after waiting at least 1 second, plug it in again. After the tray open/close procedure has completed, unplug it again and then perform the initialization procedure again.**

3) Press the "OPEN/CLOSE" key of the main unit to draw the tray out.
*Place the test disk (VT-501) on the tray and then press the "OPEN/CLOSE" key.
**(Note: Pushing the tray to close it is not possible.)**

4) Press the "PLAY" key of the main unit.

5) The "JIT 0000" is displayed on the FL indicator.
Set the FL indicator figure value to its minimum by adjusting the pickup guide shaft flap.
* The test mode is cancelled when the power is turned off.

| Measurement | Adjustment point | Mode | Disc |
|---|---|---|---|
| — | Refer to Fig.2 | Reproduction part | VT-501 |

| Measurement machine | connections | Extension cord No. |
|---|---|---|
| No need | Refer to Fig.1 | QUQ110-3740AM |

General tool : Hex-head wrench (1.27 mm)

"Flap adjustment" of the Pick-up guide shaft adjusts
"Tangential adjustment machine screw" A and
"Tilt adjustment machine screw" B from the
DVD Mechanism A'ssy bottom.

1. The part at the center on the DVD test disc is reproduced.
2. The flap adjustment screws is turned alternately and adjusted like clearly seeing the waveform of CN104"1" to the way.

Note
1. The tangential adjustment is done finish and, then, tilt is adjusted.
2. The repeat the adjustment 2-3 times,for best result.
3. The final adjustment should be tilt adjustment.

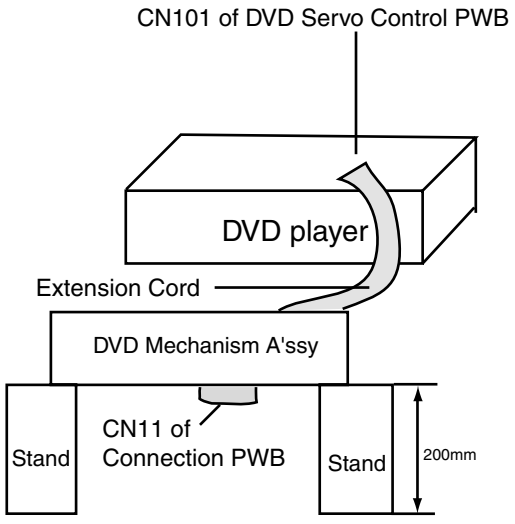



Fig.1

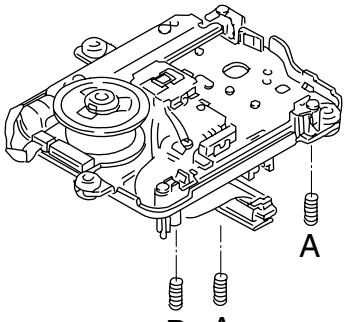


Fig.2

**Confirmation after adjustment.**

Confirm to reproduce video CD and CD after the DVD test disc is adjusted and to find abnormality.

(5) About keeping the disc

As for the DVD test disc, plane accuracy is demanded.Please note the keeping place on the disc.

1. Please do not put the disc directly on the work desk etc. after uses .
2. To keep the planarity of the disc, politely handle ,and please put in a special case and keep the disc vertically after uses .
   Please keep keeping the disc in a cool place where direct sunshine and the air-conditioning wind do not drive.
3. When the disc curves,an accurate adjustment cannot be done.
   Please exchange for a new test disc and adjust optics.
4. Other discs might not be able to be reproduced when adjusting on a curved disc.

Point of adjustment

* Please execute the static electricity protection measures before starting the adjustment.
* When the following parts are exchanged,optical adjustment "Adjust the flap of the disc motor" is necessary.
  1.The disc motor was exchanged.
  2.The laser pick up was exchanged.
  3.The traverse motor unit was exchanged.

**Note**

**Additionally, please adjust the flap of the disc motor when the picture quality deterioration is seen .The basic adjustment though, is unnecessary for part exchange in the traverse.**
**An optical adjustment in the laser pick up cannot be done.**
**Please adjust the flap of the disc motor after exchanging the laser pick up.**

* When the traverse unit is exchanged, the adjustment is basically unnecessary.

# Precautions for Service

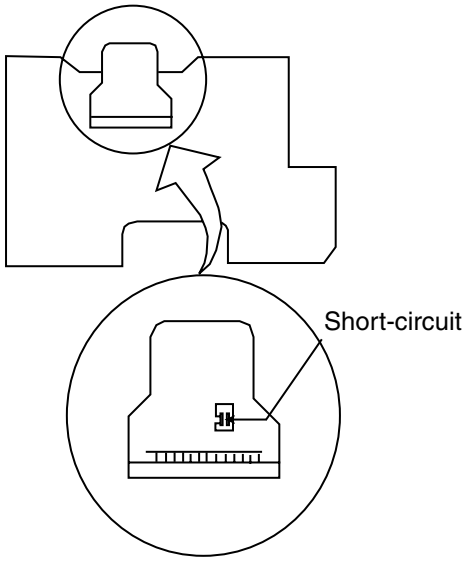
## Handling of Traverse Unit and Laser Pickup

1. Do not touch any peripheral element of the pickup or the actuator.
2. The traverse unit and the pickup are precision devices and therefore must not be subjected to strong shock.
3. Do not use a tester to examine the laser diode. (The diode can easily be destroyed by the internal power supply of the tester.)
4. To replace the traverse unit, pull out the metal short pin for protection from charging.
5. When replacing the pickup, after mounting a new pickup, remove the solder on the short land which is provided at the center of the flexible wire to open the circuit.
6. Half-fixed resistors for laser power adjustment are adjusted in pairs at shipment to match the characteristics of the optical block.
   Do not change the setting of these half-fixed resistors for laser power adjustment.

## Destruction of Traverse Unit and Laser Pickup by Static Electricity

Laser diodes are easily destroyed by static electricity charged on clothing or the human body. Before repairing peripheral elements of the traverse unit or pickup, be sure to take the following electrostatic protection:

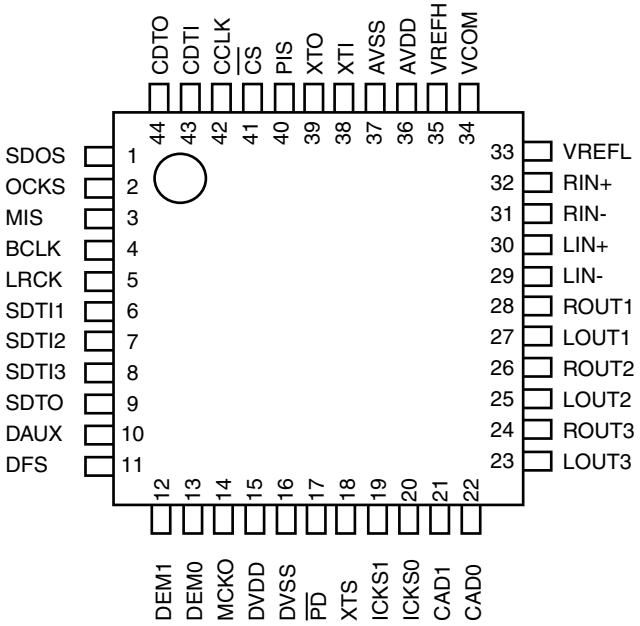
1. Wear an antistatic wrist wrap.
2. With a conductive sheet or a steel plate on the workbench on which the traverse unit or the pick up is to be repaired, ground the sheet or the plate.
3. After removing the flexible wire from the connector (CN101), short-circuit the flexible wire by the metal clip.
4. Short-circuit the laser diode by soldering the land which is provided at the center of the flexible wire for the pickup.
   After completing the repair, remove the solder to open the circuit.



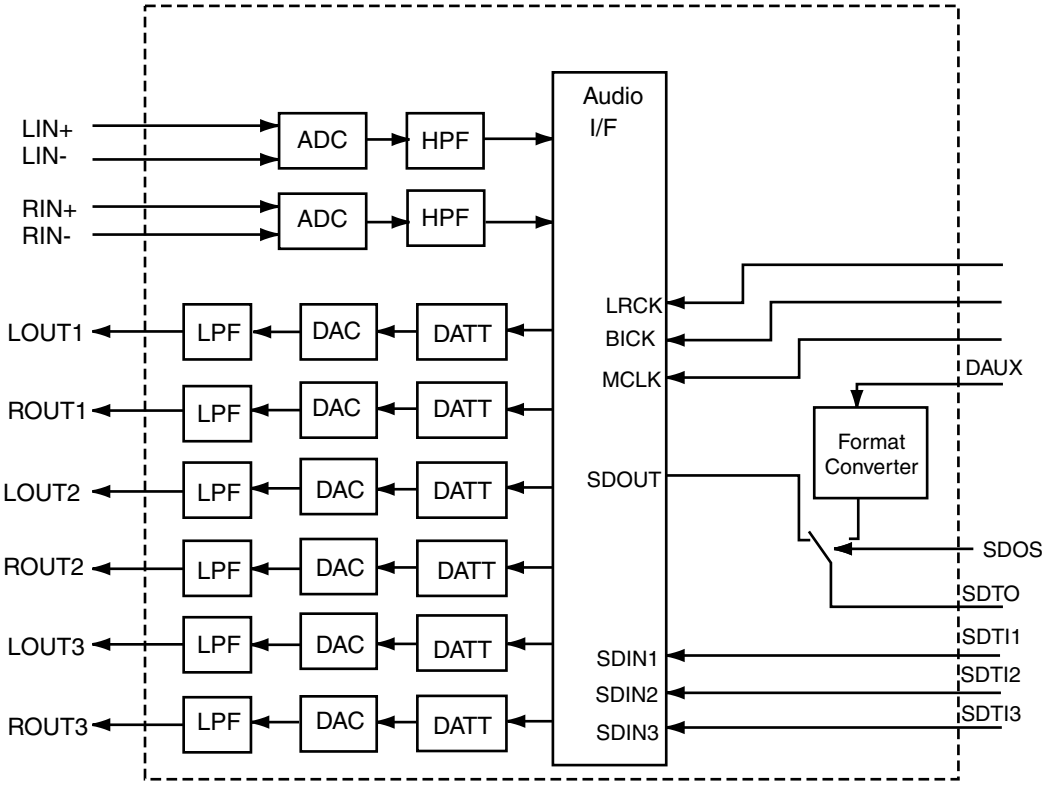
# Discription of major IC's

## ■ AL4527 (IC601): A/D, D/A Converters

1. Terminal layout




2. Block diagram

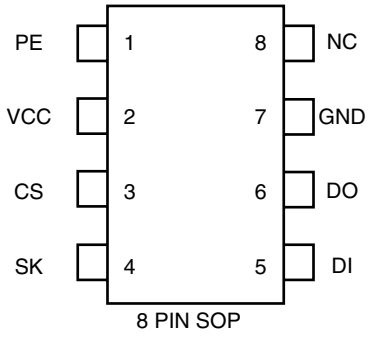


3. Pin function

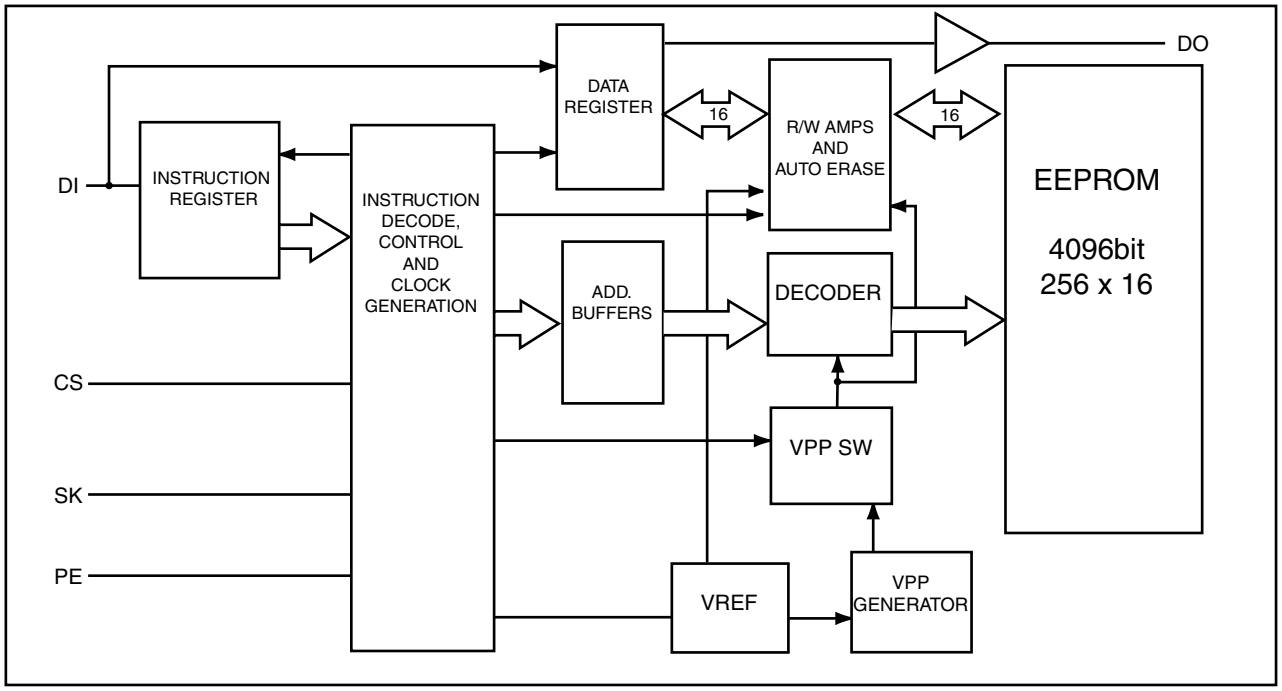
| Pin No. | Symbol | I/O | Functions |
|---|---|---|---|
| 1 | SDOS | I | SDTO source select terminal L: Internal ADC output H: DAUX input |
| 2 | OCKS | I | Serial control mode select terminal L: 3-wire serial H: IC bus |
| 3 | MIS | I | Soft mute terminal H: Starting Soft mute L: Cancel |
| 4 | BCLK | I | Audio serial data clock terminal |
| 5 | LRCK | I/O | Input channel clock terminal |
| 6 | SDTI1 | I | DAC1 audio serial data input terminal |
| 7 | SDTI2 | I | DAC2 audio serial data input terminal |
| 8 | SDTI3 | I | DAC3 audio serial data input terminal |
| 9 | SDTO | O | Audio serial data output terminal |
| 10 | DAUX | I | Auxiliary audio serial data input terminal |
| 11 | DFS | I | 2x sampling mode terminal L: Ordinal speed H: 2x speed |
| 12 | DEM1 | I | De-emphasize 1 terminal |
| 13 | DEM0 | I | De-emphasize 2 terminal |
| 14 | MCKO | - | Power terminal for output buffer 2.7 5.5 V |
| 15 | DVDD | - | Digital power supply terminal 4.5 5.5 V |
| 16 | DVSS | - | Digital ground terminal 0 V |
| 17 | PD | I | Power down & reset terminal L: Power is down and register is initialized. |
| 18 | XTS | I | Input clock selection 2 terminals |
| 19 | ICKS1 | I | Input clock selection 1 terminals |
| 20 | ICKS0 | I | Input clock selection 0 terminals |
| 21 | CAD1 | I | Chip address 1 terminal |
| 22 | CAD0 | I | Chip address 0 terminal |
| 23 | LOUT3 | O | DAC3 L channel analog output terminal |
| 24 | ROUT3 | O | DAC3 R channel analog output terminal |
| 25 | LOUT2 | O | DAC2 L channel analog output terminal |
| 26 | ROUT2 | O | DAC2 R channel analog output terminal |
| 27 | LOUT1 | O | DAC1 L channel analog output terminal |
| 28 | ROUT1 | O | DAC1 R channel analog output terminal |
| 29 | LIN- | I | L channel analog reverse input terminal |
| 30 | LIN+ | I | L channel analog non-reverse input terminal |
| 31 | RIN- | I | R channel analog reverse input terminal |
| 32 | RIN+ | I | R channel analog non-reverse input terminal |
| 33 | VREF | O | Zero input detection terminal L: P/S = H |
| 34 | VCOM | O | COMMON voltage output terminal |
| 35 | VREFH | - | Reference voltage input terminal |
| 36 | AVDD | - | Analog power supply terminal 4.5 5.5 V |
| 37 | AVSS | - | Analog ground terminal 0 V |
| 38 | XTI | O | Zero input detection terminal L: P/S = H |
| 39 | XTO | I | Master clock input terminal |
| 40 | PIS | I | Parallel/serial select terminal<br>L: Serial control mode H: Parallel control mode |
| 41 | CS | I<br>I | Audio data interface format 0 terminal (with parallel control mode)<br>Chip select terminal (with 3-wire serial control mode) |
| 42 | CCLK | I<br>I | Audio data interface format 0 terminal (with parallel control mode)<br>Control data clock terminal (with serial control mode) |
| 43 | CDTI | I<br>I/O | Loopback mode 0 terminal (with parallel control mode)<br>Control data input terminal (with serial control mode) |
| 44 | CDTO | I | Loopback mode 1 terminal |

## ■ AK93C65AF-X (IC403) : EEPROM

1.Terminal layout




2.Block diagram



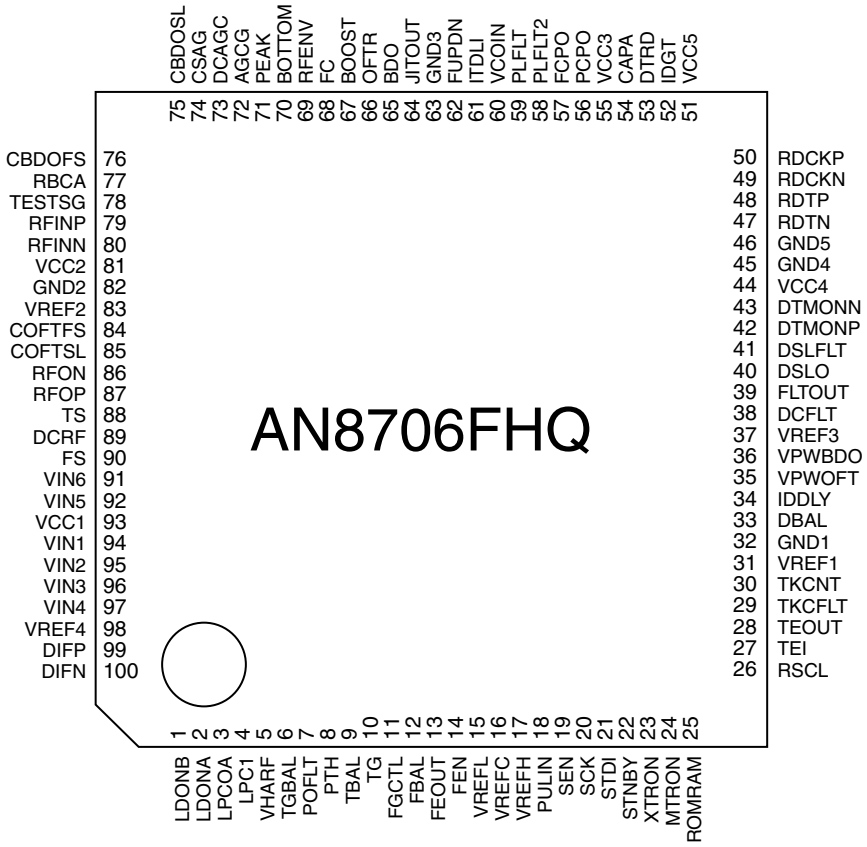

3.Pin function

| Pin no. | Symbol | Function |
|---|---|---|
| 1 | PE | Program enable (With built-in pull-up resistor) |
| 2 | VCC | Power supply |
| 3 | CS | Chip selection |
| 4 | SK | Cereal clock input |
| 5 | DI | Cereal data input |
| 6 | DO | Cereal data output |
| 7 | GND | Ground |
| 8 | NC | No connection |

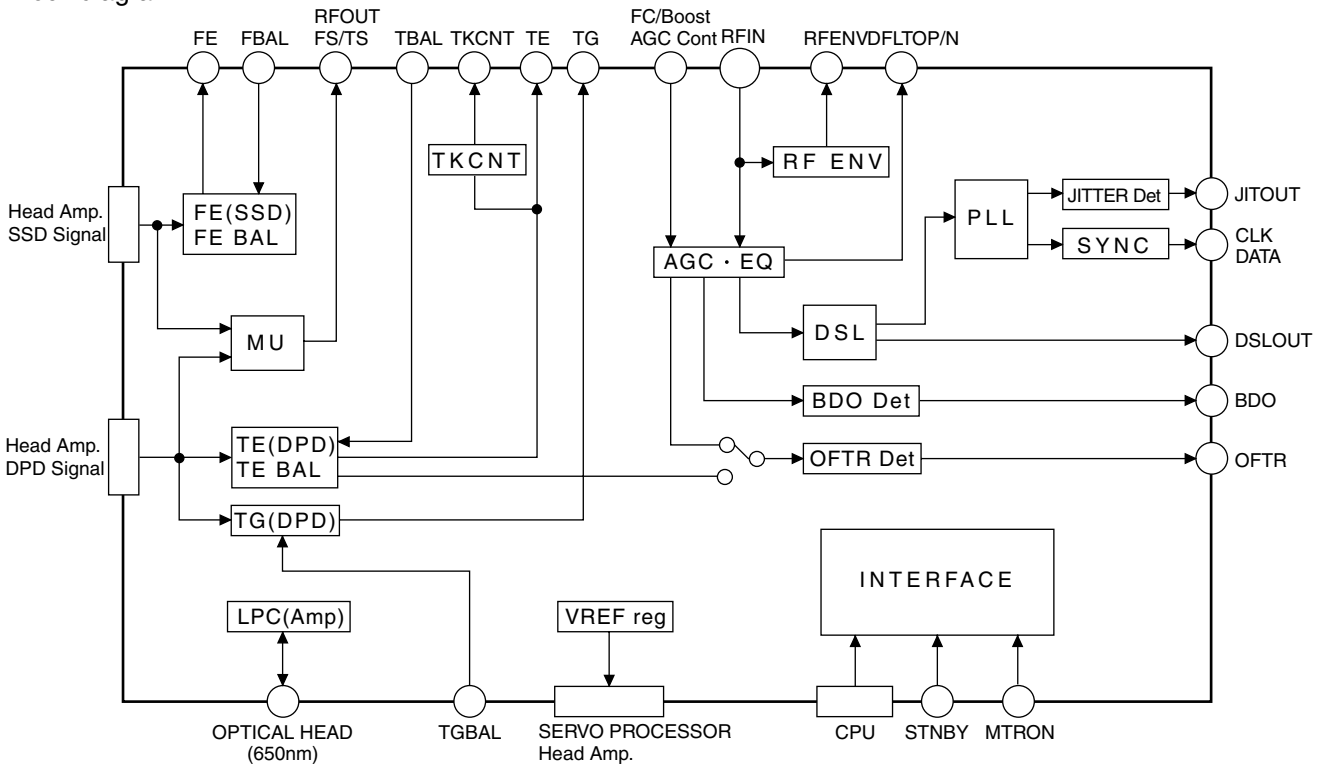
NOTE : The pull-up resistor of the PE pin is about 2.5M Ω (VCC=5V)

## ■ AN8706FHQ (IC101) : Front end processor

1.Pin layout




2.Block diagram



3.Pin function

AN8706FHQ (1/2)

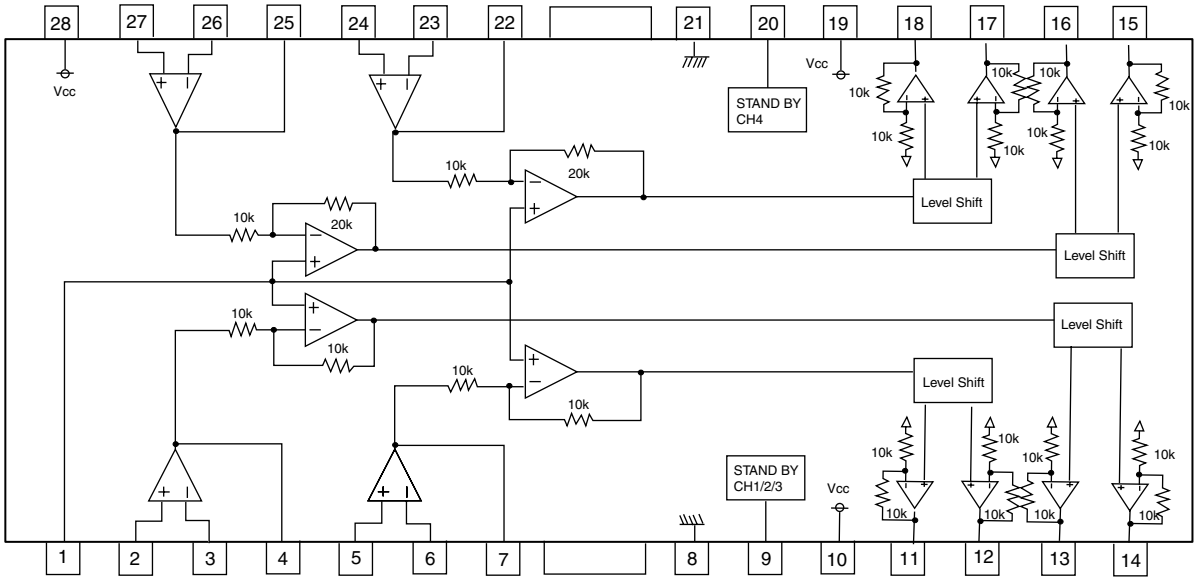
| Pin No. | Symbol | I/O | Functions |
|---|---|---|---|
| 1 | LDONB | I | Laser ON (CD Head) terminal |
| 2 | LDONA | I | Laser ON (DVD Head) terminal |
| 3 | LPCOA | O | Laser drive output terminal |
| 4 | LPC1 | I | Laser PIN input terminal |
| 5 | VHARF | O | VHALF voltage output terminal |
| 6 | TGBAL | I | Tangential phase balance control terminal |
| 7 | POFLT | O | Track detection Threshold value level terminal |
| 8 | PTH | I | Track detection Threshold value level terminal |
| 9 | TBAL | I | Tracking balance control terminal |
| 10 | TG | O | Tangential phase error signal output terminal |
| 11 | FGCTL | I | Focus amplifier Gain control terminal |
| 12 | FBAL | I | Focus balance control terminal |
| 13 | FEOUT | O | Focus error signal output terminal |
| 14 | FEN | I | Focus error output amplifier reversing input terminal |
| 15 | VREFL | O | VREFL voltage output terminal |
| 16 | VREFC | O | VREFC voltage output terminal |
| 17 | VREFH | O | VREFH voltage output terminal |
| 18 | PULIN | I | DSL,PLL drawing mode switch terminal |
| 19 | SEN | I | SEN(Cereal data input terminal) |
| 20 | SCK | I | SCK(Cereal data input terminal) |
| 21 | STDI | I | STDI(Cereal data input terminal) |
| 22 | STNBY | I | Standby mode control terminal |
| 23 | XTRON | I | Tracking OFF holding input terminal |
| 24 | MTRON | I | Monitor output ON/OFF switch terminal |
| 25 | ROMRAM | I | ROM · RAM switch terminal |
| 26 | RSCL | O | Standard current source terminal |
| 27 | TEI | I | Tracking error output Amp reversing input terminal |
| 28 | TEOUT | O | Tracking error signal output terminal |
| 29 | TKCFLT | O | Track count detection filter terminal |
| 30 | TKCNT | O | Track count output terminal |
| 31 | VREF1 | O | VREF1 voltage output terminal |
| 32 | GND1 | O | Earth terminal 1 |
| 33 | DBAL | I | Data slice offset adjustment terminal |
| 34 | IDDLY | I | Data slice delay adjustment terminal |
| 35 | VPWOFT | I | OFTR detection level setting terminal |
| 36 | VPWBDO | I | BDO detection level setting terminal |
| 37 | VREF3 | O | VREF3 voltage output terminal |
| 38 | DCFLT | O | Capacity connection terminal for data slice input filter |
| 39 | FLTOUT | O | Filter amplifier output terminal |
| 40 | DSLO | O | Data slice single data output terminal |
| 41 | DSLFLT | O | Constant filter terminal when data is sliceddelly |
| 42 | DTMONP | O | PLL differential motion 2 making to value edge signal moniter output (+) |
| 43 | DTMONN | O | PLL differential motion 2 making to value edge signal moniter output (-) |
| 44 | VCC4 | I | Power terminal 4 (5V) |
| 45 | GND4 | O | Earth terminal 4 |
| 46 | GND5 | O | Earth terminal 5 |
| 47 | RDTN | O | PLL differential motion making to synchronization RF signal reversing output |
| 48 | RDTP | O | PLL differential motion making to synchronization RF signal rotation output |
| 49 | RDCKN | O | PLL differential motion making synchronization clock reversing output |
| 50 | RDCKP | O | PLL differential motion making synchronization clock rotation output |

AN8706FHQ(2/2)

| Pin No. | Symbol | I/O | Functions |
|---|---|---|---|
| 51 | VCC5 | I | Power terminal 5 (3.3V) |
| 52 | IDGT | I | Data slice part address part gate signal input terminal (For RAM) |
| 53 | DTRD | I | Data slice data read signal input terminal(For RAM) |
| 54 | CAPA | I | Data slice CAPA(Address)signal input terminal (For RAM) |
| 55 | VCC3 | I | Power terminal 3 (5V) |
| 56 | PCPO | O | PLL phase gain set terminal |
| 57 | FCPO | O | PLL frequency gain set terminal |
| 58 | PLFLT2 | O | PLL low region filter terminal |
| 59 | PLFLT | O | PLL high region filter terminal |
| 60 | VCOIN | I | PLL VCO input terminal |
| 61 | ITDLI | O | PLL jitter free current ripple removal filter terminal |
| 62 | FUPDN | I | PLL frequency control input terminal |
| 63 | GND3 | O | Earth terminal 3 |
| 64 | JITOUT | O | Detection signal output of jitter |
| 65 | BDO | O | BDO output terminal |
| 66 | OFTR | O | OFTR output terminal |
| 67 | BOOST | I | Booth control terminal for filter |
| 68 | FC | I | FC control terminal for filter |
| 69 | RFENV | O | RF enve output terminal |
| 70 | BOTTOM | O | Bottom enve detection filter terminal |
| 71 | PEAK | O | Peak enve detection filter terminal |
| 72 | AGCG | O | AGC amplifier gain control terminal |
| 73 | DCAGC | O | AGC amp filter terminal |
| 74 | CSAG | O | Sag cancellation circuit filter terminal |
| 75 | CBDOSL | O | BDO detection capacitor terminal |
| 76 | CBDOFS | O | BDO detection capacitor terminal |
| 77 | RBCA | O | BCA detection level setting terminal |
| 78 | TESTSG | I | TEST signal input terminal |
| 79 | RFINP | I | RF signal positive moving input terminal |
| 80 | RFINN | I | RF signal reversing input terminal |
| 81 | VCC2 | I | Power terminal 2 (5V) |
| 82 | GND2 | O | Earth terminal 2 |
| 83 | VREF2 | O | VREF2 voltage output terminal |
| 84 | COFTFS | O | OFTR detection capacitor terminal |
| 85 | COFTFL | O | OFTR detection capacitor terminal |
| 86 | RFON | O | RF signal output terminal P |
| 87 | RFOP | O | RF signal output terminal N |
| 88 | TS | O | All addition amplifier (DVD) output terminal |
| 89 | DCRF | O | All addition amplifier capacitor terminal |
| 90 | FS | O | All addition amplifier (CD) output terminal |
| 91 | VIN6 | I | Focus input of external division into two terminal |
| 92 | VIN5 | I | Focus input of external division into two terminal |
| 93 | VCC1 | I | Power terminal 1 (5V) |
| 94 | VIN1 | I | External division into four (DVD/CD) RF input terminal 1 |
| 95 | VIN2 | I | External division into four (DVD/CD) RF input terminal 2 |
| 96 | VIN3 | I | External division into four (DVD/CD) RF input terminal 3 |
| 97 | VIN4 | I | External division into four (DVD/CD) RF input terminal 4 |
| 98 | VREF4 | O | VREF4 voltage output terminal |
| 99 | DIFP | O | RF signal (RAM) output terminal P |
| 100 | DIFN | O | RF signal (RAM) output terminal N |

## ■ BA5983FM (IC271) : 4CH DRIVER

1.Block Diagram




2.Pin Function

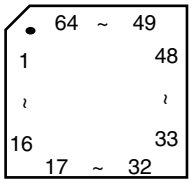
| Pin No. | Symbol | I/O | Function | Pin No. | Symbol | I/O | Function |
|---|---|---|---|---|---|---|---|
| 1 | BLAS IN | I | Input for Bias-amplifier | 15 | VO4(+) | O | Non inverted output of CH4 |
| 2 | OPIN1(+) | I | Non inverting input for CH1 OP-AMP | 16 | VO4(-) | O | Inverted output of CH4 |
| 3 | OPIN1(-) | I | Inverting input for CH1 OP-AMP | 17 | VO3(+) | O | Non inverted output of CH3 |
| 4 | OPOUT1 | O | Output for CH1 OP-AMP | 18 | VO3(-) | O | Inverted output of CH3 |
| 5 | OPIN2(+) | I | Non inverting input for CH2 OP-AMP | 19 | PowVcc2 | - | Vcc for CH3/4 power block |
| 6 | OPIN2(-) | I | Inverting input for CH2 OP-AMP | 20 | STBY2 | I | Input for Ch4 stand by control |
| 7 | OPOUT2 | O | Output for CH2 OP-AMP | 21 | GND | - | Substrate ground |
| 8 | GND | - | Substrate ground | 22 | OPOUT3 | O | Output for CH3 OP-AMP |
| 9 | STBY1 | I | Input for CH1/2/3 stand by control | 23 | OPIN3(-) | I | Inverting input for CH3 OP-AMP |
| 10 | PowVcc1 | - | Vcc for CH1/2 power block | 24 | OPIN3(+) | I | Non inverting input for CH3 OP-AMP |
| 11 | VO2(-) | O | Inverted output of CH2 | 25 | OPOUT4 | O | Output for CH4 OP-AMP |
| 12 | VO2(+) | O | Non inverted outpur of CH2 | 26 | OPIN4(-) | I | Inverting input for CH4 OP-AMP |
| 13 | VO1(-) | O | Inverted output of CH1 | 27 | OPIN4(+) | I | Non inverting input for CH4 OP-AMP |
| 14 | VO1(+) | O | Non inverted outpur of CH1 | 28 | PreVcc | - | Vcc for pre block |

## ■ JCE8011(IC551):GRAPHIC CONTROLLER

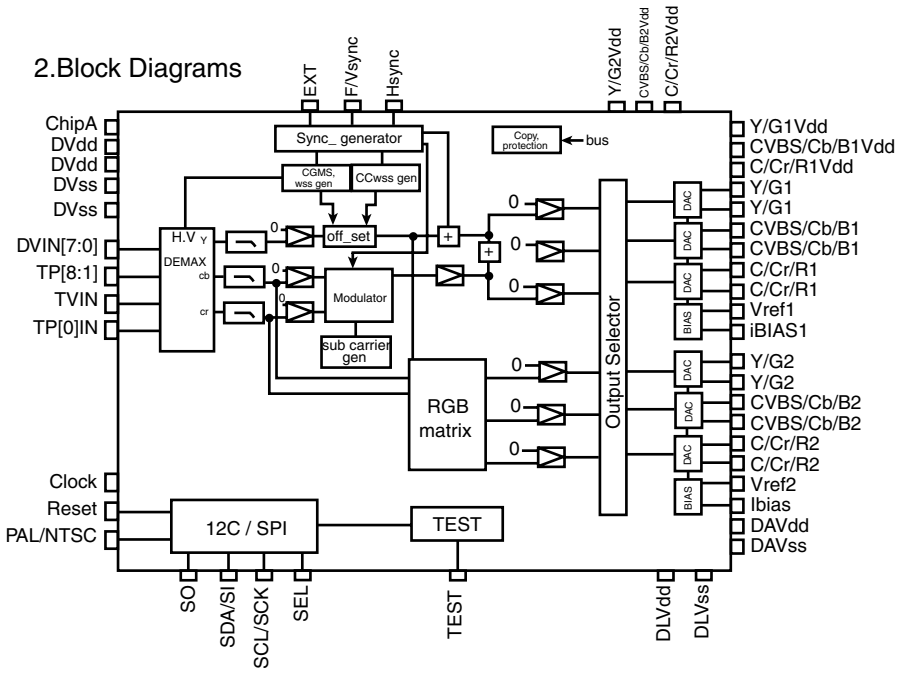
| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 1~8 | VD0~7 | I | DVD Image signal input (Multi plex data Y,Cr,Cb) |
| 9 | VCLKI | I | Dot clock signal input (27MHz) |
| 10 | HSYNCI | I | The horizontal synchronous signal input |
| 11 | VSYNCI | I | Vertical synchronous signal input |
| 12 | VCC | - | Power supply |
| 13 | VCLKD | O | Dot clock signal output (27MHz) |
| 14 | HSYNCO | O | 'H' blanking output |
| 15 | VSYNCO | O | 'V' blanking output |
| 16~23 | DOUT0~7 | O | Digital data output |
| 24 | TEST | - | Test terminal (Uses as GND usually) |
| 25 | RESETB | I | System reset signal |
| 26 | GND | - | Connect to GND |
| 27 | NTB | I | Mode switching NTSC(low) / PAL(high) |
| 28 | DTSF0 | I | Taking timing shift of VD input |
| 29 | DTSFI | I | Taking timing shift of VD input |
| 30 | VIDEG | I | Taking edge specification of VD input (0:up , 1:down) |
| 31 | DOSF0 | I | Timing shift input of output data |
| 32 | DOSF1 | I | Timing shift input of output data |
| 33 | XVRST | O | Non connect |
| 34 | F1 | O | Field Identification signal output |
| 35 | HBL | O | 'H' blanking output |
| 36 | VBL | O | 'V' blanking output |
| 37 | VOEDG | I | Output timing setting of DOUT (0:up , 1:down) |
| 38 | VCC | - | Power supply |
| 39~46 | FRD7~0 | I | Field memory read data input |
| 47 | GND | - | Connect to GND |
| 48 | FRCK | O | Field memory read clock |
| 49 | FWCK | O | Field memory write clock |
| 50 | FREB | O | Field memory read enable |
| 51 | FWEB | O | Field memory write enable |
| 52 | FRRSTB | O | Field memory read address reset |
| 53 | FWRSTB | O | Field memory write address reset |
| 54~61 | FWD7~0 | O | Field memory write data output |
| 62 | VCC | - | Power supply |
| 63~70 | CHD7~0 | I | Character ROM data |
| 71 | GND | - | Connect to GND |
| 72 | CHOEB | O | Character ROM output enable |
| 73~82 | CHA19~10 | O | Character ROM address output |
| 83 | VCC | - | Power supply |
| 84~93 | CHA9~0 | O | Character ROM address output |
| 94 | GND | - | Connect to GND |
| 95 | ACK | O | |
| 96 | CS1B | I | Serial data chip select for graphic control |
| 97 | CS2B | I | Serial data chip select for encoder control |
| 98 | SCK | I | Serial clock input |
| 99 | RXD | I | Serial input data |
| 100 | TXD | O | Serial output data |

## ■ MC44724AVFU(IC554):VIDEO ENCODER

1.Terminal Layout




2.Block Diagrams

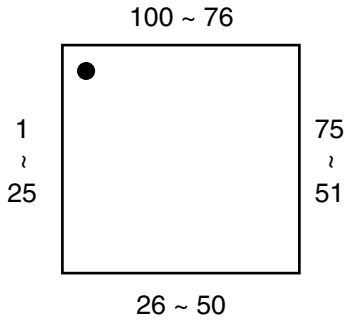



3.Pin function

| No. | Symbol | I/O | Function | No. | Symbol | I/O | Function |
|---|---|---|---|---|---|---|---|
| 1 | CVBS/Cb/B1 | O | Analog composite drive signal (+) | 33 | SO | - | Non connect |
| 2 | CVBS/Cb/B1 | O | Analog composite drive signal (-) | 34 | SDA/SI | I | SPI Mode : Serial data input |
| 3 | CVBS/Cb/B1Vdd | - | Power supply for CVBS/Cb/B DAC1 | 35 | SCL/SCK | I | Serial clock input |
| 4 | Y/G1 | O | Analog brightness signal/G drive signal (+) | 36 | SEL | I | Power supply for serial data,chip select,digital |
| 5 | $\overline{Y/G1}$ | O | Analog brightness signal/G drive signal (-) | 37 | DVdd | -- | Power supply for digital circuit |
| 6 | Y/G1/Vdd | - | Power supply for Y/G DAC | 38 | DVss | -- | Digital ground |
| 7 | C/Cr/R1 | O | Analog chroma signal (+) | 39 | DVIN7 | I/O | Y data input / test data I/O |
| 8 | $\overline{C/Cr/R1}$ | O | Analog chroma signal (-) | 40 | DVIN6 | I/O | Y data input / test data I/O |
| 9 | C/Cr/R1Vdd | - | Power supply for C/Cr/RDAC | 41 | DVIN5 | I/O | Y data input / test data I/O |
| 10 | DAVss | - | Connect to ground for DAC | 42 | DVIN4 | I/O | Y data input / test data I/O |
| 11 | TBIAS1 | O | Standard BIAS for DAC1 | 43 | DVIN3 | I/O | Y data input / test data I/O |
| 12 | Vref1 | - | Standard voltage for DAC1 | 44 | DVIN2 | I/O | Y data input / test data I/O |
| 13 | DAVdd | - | Power supply for DAC | 45 | DVIN1 | I/O | Y data input / test data I/O |
| 14 | Vref2 | - | Standard voltage for DAC2 | 46 | DVIN0 | I/O | Y data input / test data I/O |
| 15 | TBIAS2 | O | Standard BIAS for DAC2 | 47 | TVIN | I | VIDEO mote on Reset(0:nomal, 1:mute) |
| 16 | NC | - | Non connect | 48 | EXT | I/O | Frame output / VBI information input |
| 17 | CVBS/Cb/B2 | O | Analog composite drive signal (+) | 49 | F/Vsyac | I/O | Frame / Vertical, synchronous I/O |
| 18 | CVBS/Cb/B2 | O | Analog composite drive signal (-) | 50 | Chsyac | I/O | The horizontal, synchronous I/O |
| 19 | CVBS/Cb/B2Vdd | - | Power supply for CVBS/Cb/B DAC2 | 51 | DATST | I | Data input |
| 20 | Y/G2 | O | Analog brightness signal/G drive signal (+) | 52 | TP-8 | I/O | Multiplex data input |
| 21 | $\overline{Y/G2}$ | O | Analog brightness signal/G drive signal (-) | 53 | TP7 | I/O | Multiplex data input |
| 22 | Y/GVdd | - | Power supply for Y/G DAC | 54 | TP6 | I/O | Multiplex data input |
| 23 | C/Cr/R2 | O | Analog chroma signal (+) | 55 | TP5 | I/O | Multiplex data input |
| 24 | $\overline{C/Cr/R2}$ | O | Analog chroma signal (-) | 56 | DVss | - | Ground for digital circuit |
| 25 | C/Cr/R2Vdd | - | Power supply for C/Cr/RDAC2 | 57 | DVdd | - | Power supply for digital circuit |
| 26 | ChipA | - | Chip address selection | 58 | TP4 | I/O | Data input / Test data I/O |
| 27 | TEST | I | Connect to test pin | 59 | TP3 | I/O | Data input / Test data I/O |
| 28 | DVdd | - | Digital ground | 60 | TP2 | I/O | Data input / Test data I/O |
| 29 | CLOCK | I | Clock signal input (27MHz) | 61 | TP1 | I/O | Data input / Test data I/O |
| 30 | DVss | - | Power supply for digital circuit | 62 | TP0 | I/O | Data input / Test data I/O |
| 31 | Reset | I | Reset signal input L:ON | 63 | DLVdd | - | Power supply for D/A converter |
| 32 | PAL/NTSC | I | Selection NTSC/PAL NTSC:L PAL:H | 64 | DLVss | - | Ground for D/A converter |

## ■ MN101C12G (IC701): System micom

1.Terminal layout




2.Pin function

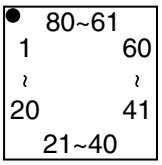
| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 1 | GND | - | GND |
| 2 | CS0 | I | A set bit0 (It is effective in the U.E version) |
| 3 | CS1 | I | A set bit1 (It is effective in the U.E version) |
| 4 | CS2 | I | A set bit2 (It is effective in the U.E version) |
| 5 | NTSEL | I | NTSC/PAL switch SW input |
| 6 | POWER SW | I | Power key input |
| 7 | SHUT1 | I | JOG shuttle inout (AD) |
| 8 | KEY1-5 | I | 10 Key input (1~5) |
| 9 | KEY6-10 | I | 10 Key input (6~10, +10) |
| 10 | VREF | - | +B (Apply 5V) |
| 11 | VDD | - | +B (Apply 5V) |
| 12 | OSC2 | O | 10MHz OSC |
| 13 | OSC1 | I | 10MHz OSC |
| 14 | VSS | - | GND |
| 15 | - | I | Unused, Connects with GND |
| 16 | - | O | Unused |
| 17 | MMOD | I | Connects with GND |
| 18 | OSDCS3 | O | VENCODER chip selection |
| 19 | RSTE | O | V.ENCOSER reset |
| 20 | OSDDO | O | V.ENCODER communication DATA |
| 21 | S2UDT | O | Communication between unit microcomputers DATA OUT |
| 22 | U2SDT | I | Communication between unit microcomputers DATA IN |
| 23 | SCLK | O | Communication between unit microcomputers CLK |
| 24 | BUSY | O | Communication between unit microcomputers BUSY |
| 25 | CPURST | O | Unit microcomputer reset |
| 26 | REQ | I | Communication between unit microcomputers REQ |
| 27 | REMO | I | Remote control interruption |
| 28 | CS3 | I | Set password change judgment bit(H:Change, L:Usual) |
| 29 | TEST | I | |
| 30 | TEST | I | H:Checkers mode, L:Normal mode |
| 31 | TEST | I | H:Running mode, L:Normal mode |
| 32 | NC | I | Un used |
| 33 | RESET | I | Reset input |
| 34 | NC | O | Un uesd |
| 35 | NC | O | Un used |
| 36 | VDD | - | Un used |
| 37 | OSDCK | O | V.ENCODER communication CK |
| 38 | NT | O | |

MN101C12G (2/2)

| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 39 | FS2 | O | 48kHz, 96kHz switch |
| 40 | CHREQ | I | Changer communication REQUEST |
| 41 | CHST | O | Changer communication STROBE |
| 42 | CHDATAIO | O | Changer communication DATAI/O |
| 43 | NC | - | |
| 44 | CHCK | O | Changer communication CLOCK |
| 45 | FLDATAO | O | FL driver communication DATAO |
| 46 | FLDATAI | I | FL driver communication DATAI |
| 47 | FLCK | O | FL driver communication CLOCK |
| 48 | FLCS | O | FL driver communication CS |
| 49 | FLRST | O | FL reset output |
| 50 | EEDO | O | EEPROM communication DATAO |
| 51 | EEDI | I | EEPROM communication DATAI |
| 52 | EECK | O | EEPROM communication CLOCK |
| 53 | EECS | O | EEPROM communication CS |
| 54 | VS1 | O | S1 control |
| 55 | VS3 | O | S3 control(STBY:H, P.ON:L) |
| 56 | DMUT1 | - | Un used |
| 57 | DMUT2 | - | Un used |
| 58 | PDB2 | - | Un used |
| 59 | PDB2 | - | Un used |
| 60 | DEMP2 | - | Un used |
| 61 | DEMP1 | - | Un used |
| 62 | DENA | - | Un used |
| 63 | KARAOKE | O | KARAOKE gain control(At KARAOKE : H) |
| 64 | POWERON | O | Power ON output |
| 65 | VS2 | O | S2 control |
| 66~76 | NC | O | Un used |
| 77 | AVCI | I | AV COMPULINK input |
| 78 | AVCO | O | AV COMPULINK output |
| 79 | NC | O | Un used |
| 80 | STANBYIND | O | Standby LED output |
| 81~85 | NC | O | Un used |
| 86 | CS4 | O | Un used |
| 87 | MA | O | DAC control MA |
| 88 | MB | O | DAC control MB |
| 89 | M1M3 | O | DAC control M1M3 |
| 90 | MD | O | DAC control MD |
| 91 | MC | O | DAC control MC |
| 92 | GAIN2 | - | Un used |
| 93 | GAIN1 | - | Un used |
| 94 | HPMUT | O | Un used |
| 95 | DAVSS | - | Un used |
| 96 | LMUTE | O | Un used |
| 97 | CMUTE | O | Un used |
| 98 | SMUTE | O | Un used |
| 99 | MUTE | O | Front mute output |
| 100 | DAVDD | - | Apply 5V |

## ■ MN101C15FDD (IC401) : System controler

1. Terminal layout




2. Pin function

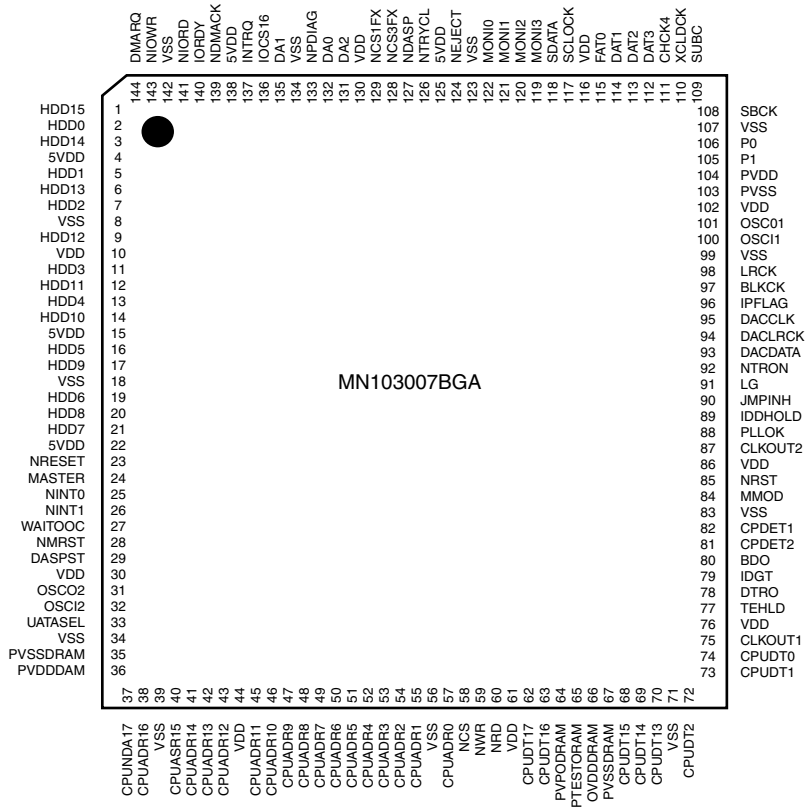
| Pin No | Symbol | Function | Pin No | Symbol | Function |
|---|---|---|---|---|---|
| 1 | | Ground connection | 41 | S-MUTE | System mute |
| 2 | DVD-S/C | DVD S/C selection terminal | 42 | | Terminal (unused) |
| 3 | VCR-S/C | VCR S/C selection terminal | 43 | T-MUTE | Tuner mute |
| 4 | | Ground connection | 44 | | Terminal (unused) |
| 5 | | Ground connection | 45 | | Terminal (unused) |
| 6 | | Ground connection | 46 | | Terminal (unused) |
| 7 | | Ground connection | 47 | RDS-DATA | RDS control signal terminal |
| 8 | | Ground connection | 48 | | Terminal (unused) |
| 9 | PROTECTOR IN | Protector input | 49 | INHIBIT IN | Inhibit signal input |
| 10 | VREF+ | Ground connection | 50 | DSP-READY | DSP control signal |
| 11 | VDD | Power supply terminal | 51 | DSP-RESET | DSP reset signal |
| 12 | OSC 2 | Quartz oscillation terminal (8 MHz) | 52 | M/CS | Control signal from IC400 |
| 13 | OSC 1 | Quartz oscillation terminal (8 MHz) | 53 | M-RESET | Reset signal from IC400 |
| 14 | VSS | Ground connection | 54 | M-STATUS | Status signal from IC400 |
| 15 | X1 | Ground connection | 55 | M-COMMAND | Command signal from IC400 |
| 16 | X0 | Terminal (unused) | 56 | M-CLK | Clock signal from IC400 |
| 17 | MMOD | Ground connection | 57 | | Terminal (unused) |
| 18 | | Terminal (unused) | 58 | | Terminal (unused) |
| 19 | | Ground connection | 59 | | Terminal (unused) |
| 20 | | Ground connection | 60 | | Terminal (unused) |
| 21 | DSP-COMMAND | DSP control signal terminal | 61 | SW-DATA | Data signal for source selector |
| 22 | DSP-STATUS | DSP control signal terminal | 62 | SW-CLK | Clock signal for source selector |
| 23 | DSP-CLK | DSP control signal terminal | 63 | VOL-STB | Strop signal for controlling volume |
| 24 | | Ground connection | 64 | VOL-DATA | Data signal for controlling volume |
| 25 | RESET-IN | Reset signal input terminal | 65 | VOL-CLK | Clock signal for controlling volume |
| 26 | TUNER-CE | Tuner chip enable | 66 | SW-STB | Strop signal for source selector |
| 27 | TUNER-CLK | Tuner clock signal input | 67 | | Terminal (unused) |
| 28 | | Ground connection | 68 | SWF MUTE | Sub woofer mute |
| 29 | TUNER-DATA | Tuner control terminal | 69 | SURR | Terminal (unused) |
| 30 | RDS SCL | Clock signal (RDS) | 70 | FR-RELAY | Front speaker relay control |
| 31 | TUNER-IN | Tuner signal input terminal | 71 | CNTR-RELAY | Center speaker relay control |
| 32 | STEREO-IN | Stereo signal input terminal | 72 | SUR-RELAY | Rear speaker relay control |
| 33 | RDS-ST | Terminal (unused) | 73 | | Terminal (unused) |
| 34 | M-BUSY | Busy signal from IC400 input | 74 | | Ground connection |
| 35 | RDSCLOCKIN | Ground connection | 75 | | Ground connection |
| 36 | | Terminal (unused) | 76 | | Ground connection |
| 37 | | Terminal (unused) | 77 | | Ground connection |
| 38 | | Terminal (unused) | 78 | LED | Terminal (unused) |
| 39 | VIDEO1 | VIDEO 1 signal | 79 | D.AUT LED | Indicate control (DIGITAL AUTO) |
| 40 | VIDEO2 | VIDEO 2 signal | 80 | SURR LED | Indicate control (SURROUND) |

## ■ MN102L25GCY(IC401):UNIT CPU

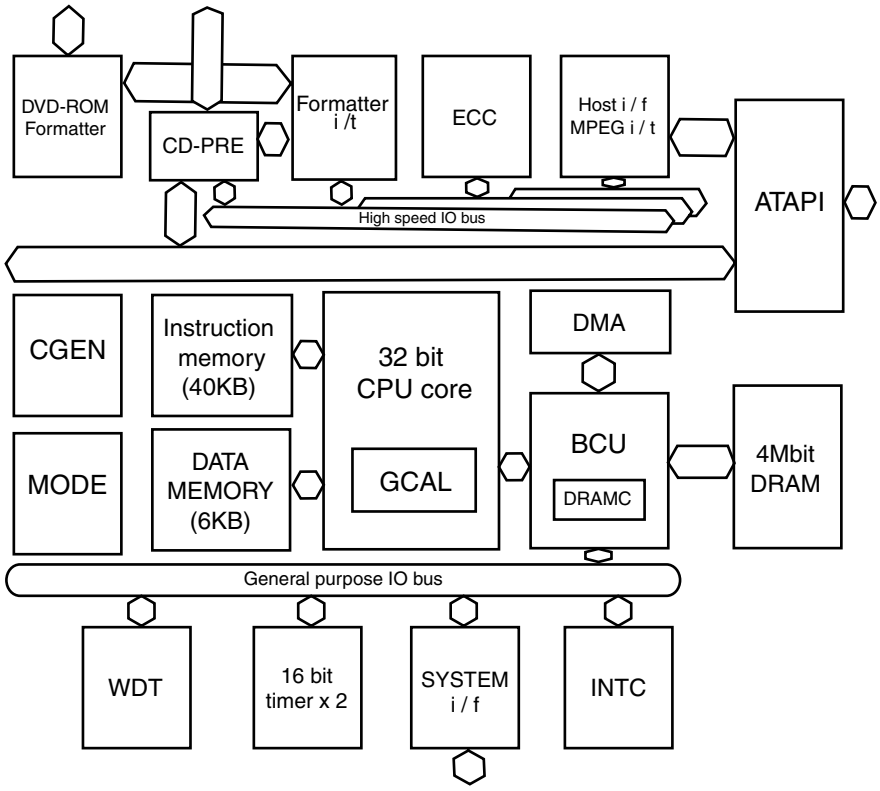
| Pin No. | Symbol | I/O | Function | Pin No. | Symbol | I/O | Function |
|---|---|---|---|---|---|---|---|
| 1 | WAIT | I | Micon wait signal input | 51 | FGIN | I | Photo input |
| 2 | RE | O | Read enable | 52 | - | | Non connect |
| 3 | MUTE | O | Driver mute | 53 | ADSCEN | O | Serial enable signal for ADSC |
| 4 | WEM | O | Write enable | 54 | VDD | - | Non connect |
| 5 | CS0 | O | Non connect | 55 | FEPEN | O | Serial enable signal for FEP |
| 6 | CS1 | O | Chip select for ODC | 56 | SLEEP | O | Standby signal for FEP |
| 7 | CS2 | O | Chip select for ZIVA | 57 | BUSY | I | Communication busy |
| 8 | CS3 | O | Chip select for outer ROM | 58 | REQ | O | Communication Request |
| 9 | FGCONT | O | Photo control | 59 | CIRCEN | O | CIRC command select |
| 10 | /SPKICK | O | Spin kick | 60 | HSSEEK | O | Seek select |
| 11 | LSIRST | O | LSI reset | 61 | VSS | - | Power supply |
| 12 | WORD | O | Bus selection input | 62 | EPCS | O | EEPROM chip select |
| 13 | A0 | O | Address bus 0 for CPU | 63 | EPSK | O | EEPROM clock |
| 14 | A1 | O | Address bus 1 for CPU | 64 | DPDI | I | EEPROM data input |
| 15 | A2 | O | Address bus 2 for CPU | 65 | EPDO | O | EEPROM data output |
| 16 | A3 | O | Address bus 3 for CPU | 66 | VDD | - | Power supply |
| 17 | VDD | - | Power supply | 67 | SCLK0 | I | Communication clock |
| 18 | SYSCLK | O | System clock signal output | 68 | S2UDT | I | Communication input data |
| 19 | VSS | - | Power supply | 69 | U2SDT | O | Communication output data |
| 20 | XI | - | Non connect | 70 | CPSCK | O | Clock for ADSC serial |
| 21 | XO | - | Non connect | 71 | SDIN | I | ADSC serial data input |
| 22 | VDD | - | Power supply | 72 | SDOUT | O | ADSC serial data output |
| 23 | OSCI | I | Clock signal input(13.5MHz) | 73 | - | - | Non connect |
| 24 | OSCO | - | Non connect | 74 | - | - | Non connect |
| 25 | MODE | I | CPU Mode selection input | 75 | NMI | - | Non connect |
| 26 | A4 | O | Address bus 4 for CPU | 76 | ADSCIRQ | I | Interrupt input of ADSC |
| 27 | A5 | O | Address bus 5 for CPU | 77 | ODCIRQ | I | Interrupt input of ODC |
| 28 | A6 | O | Address bus 6 for CPU | 78 | DECIRQ | I | Interrupt input of ZIVA |
| 29 | A7 | O | Address bus 7 for CPU | 79 | WAKEUP | O | Non connect |
| 30 | A8 | O | Address bus 8 for CPU | 80 | ODCIRQ2 | I | Non connect |
| 31 | A9 | O | Address bus 9 for CPU | 81 | ADSEP | I | Address data selection input |
| 32 | A10 | O | Address bus 10 for CPU | 82 | RST | I | Reset input |
| 33 | A11 | O | Address bus 11 for CPU | 83 | VDD | - | Power supply |
| 34 | VDD | - | Power supply | 84 | TEST1 | I | Test signal 1 input |
| 35 | A12 | O | Address bus 12 for CPU | 85 | TEST2 | I | Test signal 2 input |
| 36 | A13 | O | Address bus 13 for CPU | 86 | TEST3 | I | Test signal 3 input |
| 37 | A14 | O | Address bus 14 for CPU | 87 | TEST4 | I | Test signal 4 input |
| 38 | A15 | O | Address bus 15 for CPU | 88 | TEST5 | I | Test signal 5 input |
| 39 | A16 | O | Address bus 16 for CPU | 89 | TEST6 | I | Test signal 6 input |
| 40 | A17 | O | Address bus 17 for CPU | 90 | TEST7 | I | Test signal 7 input |
| 41 | A18 | O | Address bus 18 for CPU | 91 | TEST8 | I | Test signal 8 input |
| 42 | A19 | O | Address bus 19 for CPU | 92 | VSS | - | Power supply |
| 43 | VSS | - | Power supply | 93 | D0 | I/O | Data bus 0 of CPU |
| 44 | A20 | O | Address bus 20 for CPU | 94 | D1 | I/O | Data bus 1 of CPU |
| 45 | TXSEL | O | TX Select | 95 | D2 | I/O | Data bus 2 of CPU |
| 46 | TMPSN | O | Non connect | 96 | D3 | I/O | Data bus 3 of CPU |
| 47 | - | | Non connect | 97 | D4 | I/O | Data bus 4 of CPU |
| 48 | ADPD | O | AD Power down | 98 | D5 | I/O | Data bus 5 of CPU |
| 49 | - | | Non connect | 99 | D6 | I/O | Data bus 6 of CPU |
| 50 | TRVSW | I | Detection switch of traverse inside | 100 | D7 | I/O | Data bus 7 of CPU |

## MN103007BGA (IC301) : Optical disc controller

1.Terminal layout




2.Block diagram



3.Function

MN103007BGA(1/2)

| Pin NO. | Symbol | I/O | Function |
|---|---|---|---|
| 1 | HDD15 | I/O | ATAPI data |
| 2 | HDD0 | I/O | ATAPI data |
| 3 | HDD14 | I/O | ATAPI data |
| 4 | 5VDD | | |
| 5 | HDD1 | I/O | ATAPI data |
| 6 | HDD13 | I/O | ATAPI data |
| 7 | HDD2 | I/O | ATAPI data |
| 8 | VSS | | |
| 9 | HDD12 | I/O | ATAPI data |
| 10 | VDD | | |
| 11 | HDD3 | I/O | ATAPI data |
| 12 | HDD11 | I/O | ATAPI data |
| 13 | HDD4 | I/O | ATAPI data |
| 14 | HDD10 | I/O | ATAPI data |
| 15 | 5VDD | | |
| 16 | HDD5 | I/O | ATAPI data |
| 17 | HDD9 | I/O | ATAPI data |
| 18 | VSS | | |
| 19 | HDD6 | I/O | ATAPI data |
| 20 | HDD8 | I/O | ATAPI data |
| 21 | HDD7 | I/O | ATAPI data |
| 22 | 5VDD | | |
| 23 | NRESET | I | ATAPI reset |
| 24 | MASTER | I/O | ATAPI master / slave selection |
| 25 | NINT0 | O | System control interruption 0 |
| 26 | NINT1 | O | System control interruption 1 |
| 27 | WAITODC | O | System control weight control |
| 28 | NMRST | O | System control reset |
| 29 | DASPST | I | DASP signal initializing |
| 30 | VDD | | |
| 31 | OSCO2 | I,O | VSS connection,OPEN |
| 32 | OSCI2 | I,O | VSS connection, OPEN |
| 33 | UATASEL | I | VSS connection |
| 34 | VSS | | |
| 35 | PVSSDRAM | | |
| 36 | PVDODRAM | | |
| 37 | CPUADR17 | I | System control address |
| 38 | CPUADR18 | I | System control address |
| 39 | VSS | | |
| 40 | CPUADR15 | I | System control address |
| 41 | CPUADR14 | I | System control address |
| 42 | CPUADR13 | I | System control address |
| 43 | CPUADR12 | I | System control address |
| 44 | VDD | | System control address |
| 45 | CPUADR11 | I | System control address |
| 46 | CPUADR10 | I | System control address |
| 47 | CPUADR9 | I | System control address |
| 48 | CPUADR8 | I | System control address |
| 49 | CPUADR7 | I | System control address |
| 50 | CPUADR6 | I | System control address |
| 51 | CPUADR5 | I | System control address |
| 52 | CPUADR4 | I | System control address |
| 53 | CPUADR3 | I | System control address |
| 54 | CPUADR2 | I | System control address |
| 55 | CPUADR1 | I | System control address |
| 56 | VSS | | GND |
| 57 | CPUADR0 | I | System control address |
| 58 | NCS | I | System control chip selection |
| 59 | NWR | I | System control wright |
| 60 | NRD | I | System control lead |
| 61 | VDD | | Apply 3V |
| 62 | CPUDT7 | | System control data |
| 63 | CPUDT6 | | System control data |
| 64 | PVPPDRAM | O | C=10000PF is connected between VSS |
| 65 | PTESTDRAM | I | VSS connected |
| 66 | OVDDDRAM | | |
| 67 | PVSSDRAM | | |
| 68 | CPUDT5 | | System control data |
| 69 | CPUDT4 | | System control data |
| 70 | CPUDT3 | | System control data |
| 71 | VSS | | GND |
| 72 | CPUDT2 | | System control data |
| 73 | CPUDT1 | I/O | System control data |
| 74 | CPUDT0 | I/O | System control data |
| 75 | CLKOUT1 | O | 16.9/11.2/8.45MHz clock |
| 76 | VDD | - | Apply 3V |
| 77 | TEHLD | O | Mirror gate |
| 78 | DTRO | O | Data part frequency control switch |
| 79 | IDGT | O | Part CAPA switch |
| 80 | BDO | I | RF dropout / BCA data of making to binary |
| 81 | CPDET2 | I | Outer side CAPA detection |
| 82 | CPDET1 | I | Side of surroundings on inside |
| 83 | VSS | | GND |
| 84 | MMOD | I | VSS connected |
| 85 | NRST | I | System reset |
| 86 | VDD | - | Apply 3V |
| 87 | CLKOUT2 | O | 16.9MHz clock |
| 88 | PLLOK | O | Frame mark detection |
| 89 | IDOHOLD | O | ID gate for tracking holding |
| 90 | JMPINH | O | Jump prohibition |

MN103007BGA(2/2)

| Pin NO. | Symbol | I/O | Function |
|---|---|---|---|
| 91 | LG | O | Land / group switch |
| 92 | NTRON | I | Tracking ON |
| 93 | DACDATA | O | Cereal output |
| 94 | DACLRCK | O | L and R identification output |
| 95 | DACCLK | I | Clock for cereal output |
| 96 | IPFLAG | I | Interpolation flag input |
| 97 | BLKCK | I | Sub-code,Block clock input |
| 98 | LRCK | I | L and R identification signal output |
| 99 | VSS | | |
| 100 | OSCI1 | I,O | 16.9MHz oscillation |
| 101 | OSCO1 | I,O | 16.9MHz oscillation |
| 102 | VDD | | |
| 103 | PVSS | | |
| 104 | PVDD | | |
| 105 | P1 | I/O | Terminal MASTER polarity switch input |
| 106 | P0 | I/O | CIRC-RAM OVER/UNDER Interruption signal input |
| 107 | VSS | | |
| 108 | SBCK | O | Sub-code, Clock output for serial input |
| 109 | SUBC | I | Sub-code, Cereal input |
| 110 | XCLDCK | I | Sub-code, Frame clock input |
| 111 | CHCK4 | I | Read clock to DAT3~0(Output of dividing frequency four from ADSC) |
| 112 | DAT3 | I | Read data from DISC (PAralle output from ADSC) |
| 113 | DAT2 | I | |
| 114 | DAT1 | I | |
| 115 | DAT0 | I | |
| 116 | VDD | | |
| 117 | SCLOCK | I/O | Debugging cereal clock (270 Ω pull up) |
| 118 | SDATA | I/O | Debugging cereal data (270 Ω pull up) |
| 119~122 | MONI3~0 | O | Internal goods title monitor |
| 123 | VSS | | |
| 124 | NEJECT | I | Eject detection |
| 125 | 5VDD | | |
| 126 | NTRYCL | I | Tray close detection |
| 127 | NDASP | I/O | ATAPI Drive active/ Sulave connection I/O |
| 128 | NCS3FX | I | ATAPI host chip selection |
| 129 | NCS1FX | I | ATAPI host chip selection |
| 130 | VDD | | |
| 131 | DA2 | I/O | ATAPI host address |
| 132 | DA0 | I/O | ATAPI host address |
| | | | |
| | | | |

| Pin NO. | Symbol | I/O | Function |
|---|---|---|---|
| 133 | NPDIAG | I/O | ATAPI slave master diagnosis input |
| 134 | VSS | | |
| 135 | DA1 | I/O | ATAPI host address |
| 136 | IOCS16 | O | ATAPI output of selection of width of host data bus |
| 137 | INTRQ | O | ATAPI host interruption output |
| 138 | 5VDD | | |
| 139 | NDMACK | I | ATAPI host DMA response |
| 140 | IORDY | O | ATAPI host ready output |
| 141 | NIORD | I | ATAPI host read |
| 142 | VSS | | |
| 143 | NIOWR | I/O | ATAPI host writes |
| 144 | DMARQ | O | ATAPI host DMA demand |

MN103007BGA(3/4)

| Pin NO. | Symbol | I/O | Function |
|---|---|---|---|
| 91 | LG | O | Land / group switch |
| 92 | NTRON | I | Tracking ON |
| 93 | DACDATA | O | Cereal output |
| 94 | DACLRCK | O | L and R identification output |
| 95 | DACCLK | I | Clock for cereal output |
| 96 | IPFLAG | I | Interpolation flag input |
| 97 | BLKCK | I | Sub-code,Block clock input |
| 98 | LRCK | I | L and R identification signal output |
| 99 | VSS | | |
| 100 | OSCI1 | I,O | 16.9MHz oscillation |
| 101 | OSCO1 | I,O | 16.9MHz oscillation |
| 102 | VDD | | |
| 103 | PVSS | | |
| 104 | PVDD | | |
| 105 | P1 | I/O | Terminal MASTER polarity switch input |
| 106 | P0 | I/O | CIRC-RAM OVER/UNDER<br>Interruption signal input |
| 107 | VSS | | |
| 108 | SBCK | O | Sub-code, Clock output for serial input |
| 109 | SUBC | I | Sub-code, Cereal input |
| 110 | XCLDCK | I | Sub-code, Frame clock input |
| 111 | CHCK4 | I | Read clock to DAT3~0<br>(Output of dividing frequency four from ADSC) |
| 112 | DAT3 | I | Read data from DISC<br>(PAralle output from ADSC) |
| 113 | DAT2 | I | |
| 114 | DAT1 | I | |
| 115 | DAT0 | | |
| 116 | VDD | | |
| 117 | SCLOCK | I/O | Debugging cereal clock<br>(270Ω pull up) |
| 118 | SDATA | I/O | Debugging cereal data<br>(270Ω pull up) |
| 119 | MONI3 | O | Internal goods title monitor |
| 120 | MONI2 | O | |
| 121 | MONI1 | O | |
| 122 | MONI0 | O | |
| 123 | VSS | | |
| 124 | NEJECT | I | Eject detection |
| 125 | 5VDD | | |
| 126 | NTRYCL | I | Tray close detection |
| 127 | NDASP | I/O | ATAPI Drive active/<br>Sulave connection I/O |
| 128 | NCS3FX | I | ATAPI host chip selection |
| 129 | NCS1FX | I | ATAPI host chip selection |
| 130 | VDD | | |
| 131 | DA2 | I/O | ATAPI host address |
| 132 | DA0 | I/O | ATAPI host address |

MN103007BGA(4/4)

| Pin NO. | Symbol | I/O | Function |
|---|---|---|---|
| 133 | NPDIAG | I/O | ATAPI slave master diagnosis input |
| 134 | VSS | | |
| 135 | DA1 | I/O | ATAPI host address |
| 136 | IOCS16 | O | ATAPI output of selection of width of host data bus |
| 137 | INTRQ | O | ATAPI host interruption output |
| 138 | 5VDD | | |
| 139 | NDMACK | I | ATAPI host DMA response |
| 140 | IORDY | O | ATAPI host ready output |
| 141 | NIORD | I | ATAPI host read |
| 142 | VSS | | |
| 143 | NIOWR | I/O | ATAPI host writes |
| 144 | DMARQ | O | ATAPI host DMA demand |

## ■ MN173222DF (IC400): Operation Switches and Fluorescent Display Controller

1. Key matrix

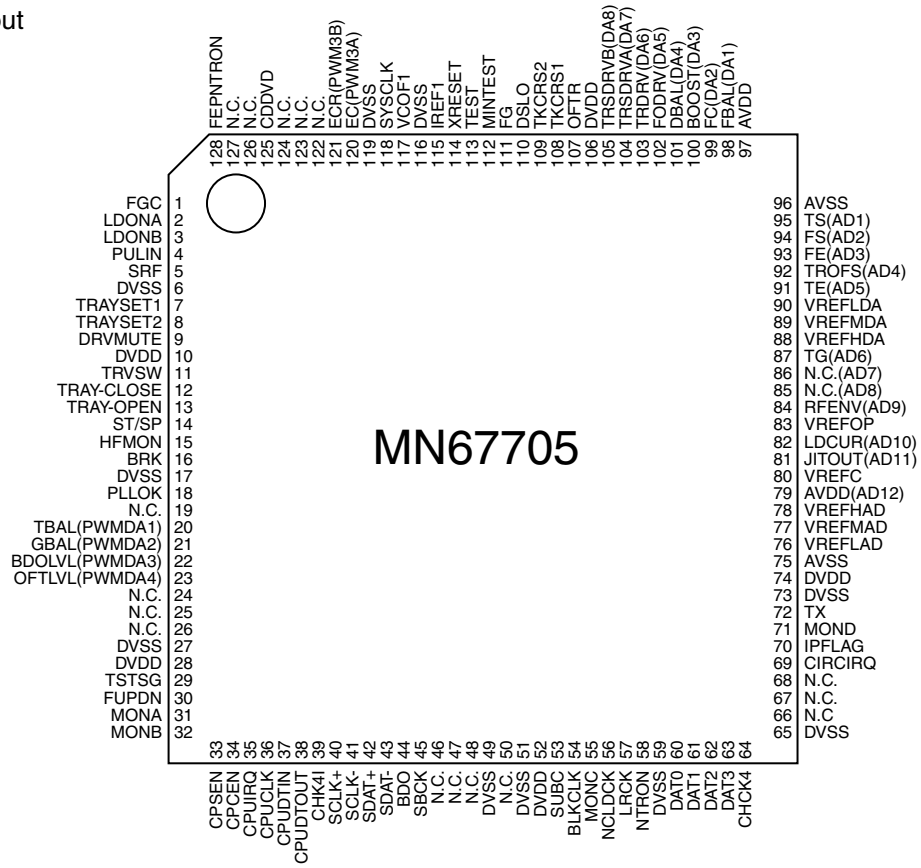
| | KEY OUT 0 | KEY OUT1 | KEY OUT 2 | KEY OUT 3 | KEY OUT 4 |
|---|---|---|---|---|---|
| KEY IN 0 | POWER | DSP MODE | DVD | ◄ | CD |
| KEY IN 1 | ADJUST | SURROUND | TV SOUND/DBS | ► | PHONE |
| KEY IN 2 | SETTING | ANALOG/DIGITAL | VCR | ▲ | TAPE/MD |
| KEY IN 3 | MEMORY | ——— | ONE TOUCH OP. /INPUT ATT. | ▼ | FM/AM |

2. Pin function

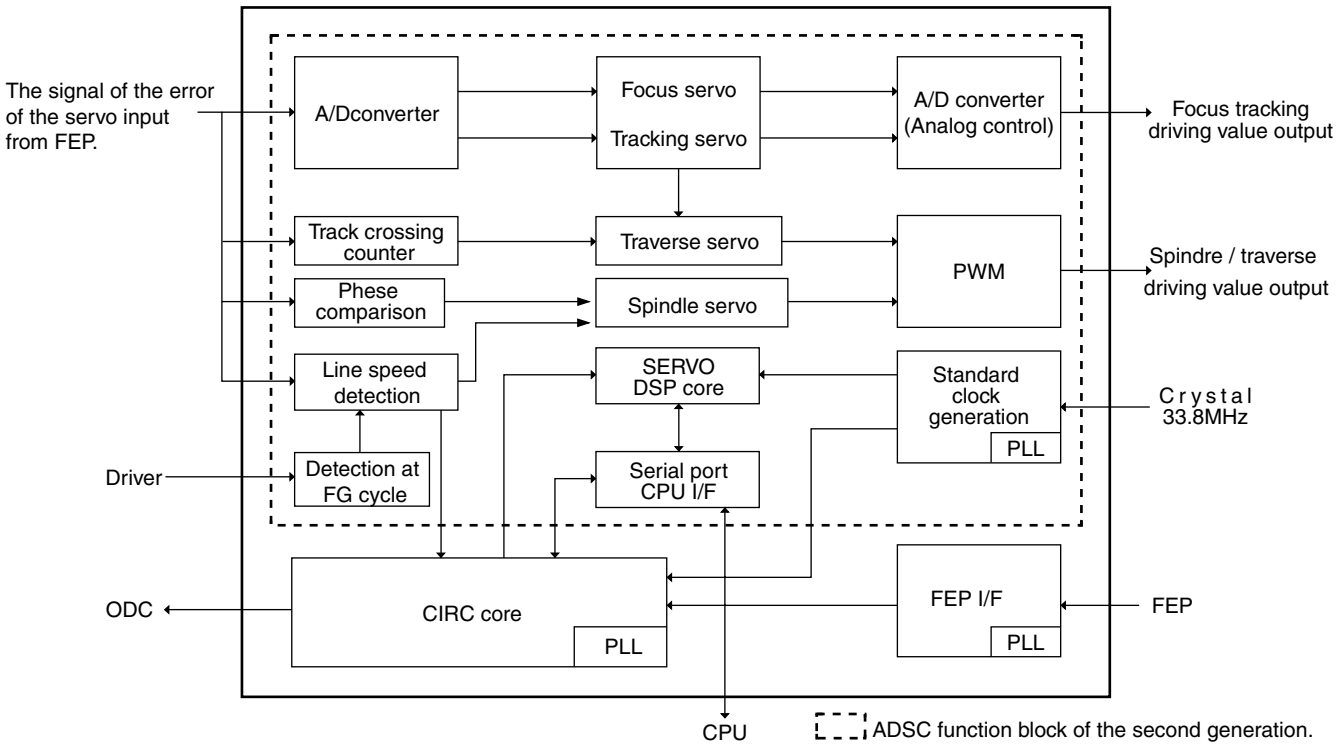
| Pin No. | Symbol | I/O | Functions |
|---|---|---|---|
| 1-22 | S22-S1 | O | Segment control signal output |
| 23 | VPP | - | Power supply terminal |
| 24-29 | KO0-5/G14-9 | O | Key matrix output/grid control signal output |
| 30,31 | G8,G7 | O | Grid control signal output |
| 32,33 | SW0,1/G6,5 | O | Grid control signal output |
| 34-36 | G4-G2 | O | Grid control signal output |
| 37-39 | G16,15,1 | O | Grid control signal output |
| 40,41 | | - | Ground connection |
| 42 | JOG1,2 | I | JOG volume control input |
| 44 | MBUSY | I | Busy signal from IC401 |
| 45 | MCLK | I | Clock signal from IC401 |
| 46 | COMMAND | I | Command data input from IC401 |
| 47 | STATUS | O | Status signal output to IC401 |
| 48 | M/CS | I | Chip select signal input from IC401 |
| 49 | RM | I | Remote control signal input |
| 50 | VCRI | I | AV COMPULINK input (VCR) |
| 51 | DCSI | I | COMPULINK signal input |
| 52 | DCSO | O | COMPULINK signal output |
| 53 | VCRO | O | AV COMPULINK output (VCR) |
| 54 | TVO | O | AV COMPULINK output (TV) |
| 55 | TVC | O | AV COMPULINK control output |
| 56,57 | | - | Ground connection |
| 58 | POWER | - | Power supply terminal |
| 59 | STANDBY | O | Stand-by indicator control |
| 60-63 | KI3-KI0 | I | Key matrix input |
| 64-67 | S36-S33 | O | Segment control signal output |
| 68 | RST | I | Reset signal input |
| 69 | X1 | | Ground connection |
| 70 | X2 | | Terminal (unused) |
| 71 | VSS | - | Ground connection |
| 72,73 | OSC2,1 | - | Quartz oscillation terminal (6 MHz) |
| 74 | VDD | - | Power supply terminal |
| 75-84 | S32-S23 | O | Segment control signal output |

## ■ MN67705EA (IC201) : Digital servo controller

1.Terminal layout




2.Block diagram



3.Pin function

MN67705EA (1/3)

| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 1 | FGC | 0 | H fixation |
| 2 | LDONA | O | Laser drive controlA (ON / OFF) |
| 3 | LDONB | O | Laser drive controlB (ON / OFF) |
| 4 | PULIN | O | DSL and PLL high boost signal (FEP) |
| 5 | SRF | O | Head amplifier gain H/L selection |
| 6 | DVSS | — | Ground for digital circuit |
| 7 | TRAYSET1 | O | Tray drive ON/OFF and direction control |
| 8 | TRAYSET2 | O | Tray drive ON/OFF and direction control |
| 9 | DRVMUTE | O | Drive IC mute control |
| 10 | DVDD | — | Power supply for digital circuit |
| 11 | TRVSW | I | Surroundings position detection in traverse |
| 12 | TRAY-CLOSE | I | Tray close detection SW |
| 13 | TRAY-OPEN | I | Tray opening detection SW |
| 14 | ST/SP | O | Spindle motor drive switch (START /STOP) |
| 15 | HFMON | O | High cycle module control |
| 16 | BRK | O | Spindle motor IC short brake control |
| 17 | DVSS | — | Ground for digital circuit |
| 18 | PLLOK | I | SYNC detection (DVD : 18T / CD : 22T) |
| 19 | N.C. | O | |
| 20 | TBAL(PWMDA1) | O | Tracking balance (FEP) |
| 21 | GBAL(PWMDA2) | O | Tangential balance (FEP) |
| 22 | BDOLVL(PWMDA3) | O | BDO slice level (FEP) |
| 23 | OFTLVL(PWMDA4) | O | Off-track error slice level (FEP) |
| 24 | N.C. | O | |
| 25 | N.C. | O | |
| 26 | N.C. | O | |
| 27 | DVSS | — | Ground for digital circuit |
| 28 | DVDD | — | Power supply for digital circuit |
| 29 | TSTSG | O | Self calibration signal (FEP) |
| 30 | FUPDN | O | Signal of frequency UP/DOWN of PLL (FEP) |
| 31 | MONA | O | Monitor terminal A |
| 32 | MONB | O | Monitor terminal B |
| 33 | CPSEN | I | Servo DSP cereal I/F chip selection (SYSCOM) |
| 34 | CPCEN | I | CIRC cereal I/F chip selection (SYSCOM) |
| 35 | CPUIRQ | O | Interrupt request to silicon (SYSCOM) |
| 36 | CPUCLK | I | Silicon cereal I/F clock (SYSCOM) |
| 37 | CPUDTIN | I | Silicon cereal I/F data input (SYSCOM) |
| 38 | CPUDTOUT | O | Silicon cereal I/F data output (SYSCOM) |
| 39 | CHK4I | I | Connects with unused DVSS |
| 40 | SCLK+ | I | Lead channel clock differential motion signal (positive) |
| 41 | SCLK- | I | Lead channel clock differential motion signal (negative) |
| 42 | SDAT+ | I | Lead channel data differential motion signal (positive) |
| 43 | SDAT- | I | Lead channel data differential motion signal (negative) |
| 44 | BDO | I | BDO + BCA (FEP) |
| 45 | SBCK | I | CD sub-code data shift clock (ODC) |
| 46 | IREF2 | — | Connects with unused DVSS |

MN67705EA (2/3)

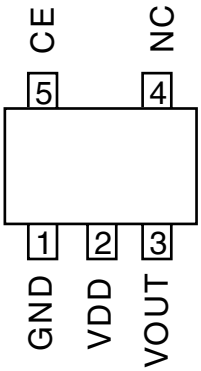
| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 47 | IREF3 | — | Connects with unused DVSS |
| 48 | VCOF2 | — | Connects with unused DVSS |
| 49 | DVSS | — | Ground for digital circuit |
| 50 | VCOE3 | — | Connects with unused DVSS |
| 51 | DVSS | — | Ground for digital cirucuit |
| 52 | DVDD | — | Power supply for digital cirucuit |
| 53 | SUBC | O | CD sub-code (ODC) |
| 54 | BLKCLK | O | CD sub-code synchronous signal (ODC)/Jump output of one at DVD |
| 55 | MONC | O | Monitor terminal C |
| 56 | NCLDCK | O | Sub-code data freme clock (ODC) |
| 57 | LRCK | O | LR channnel data strove circCIRC(ODC) |
| 58 | NTRON | O | L: Tracking ON (ODC) |
| 59 | DVSS | — | Ground for digital cirucuit |
| 60 | DAT0 | O | CIRC / Binary making DVD data output |
| 61 | DAT1 | O | CIRC / Binary making DVD data output |
| 62 | DAT2 | O | CIRC / Binary making DVD data output |
| 63 | DAT3 | O | CIRC / Binary making DVD data output |
| 64 | CHCK4 | O | Synchronous clock of DAT0～3 |
| 65 | DVSS | — | Ground for digital circuit |
| 66 | DACCLK | O | |
| 67 | DACLRCK | I | Connects with unused DVSS |
| 68 | DACDATA | I | Connects with unused DVSS |
| 69 | CIRCIRQ | O | RAM with built-in CIRC exceeds / Underflow interrupt |
| 70 | IPFLAG | O | CIRC error flag |
| 71 | MOND | O | Monitor terminal D |
| 72 | TX | O | Digital audio interface |
| 73 | DVSS | — | Ground for digital cirucuit |
| 74 | DVDD | — | Power supply for digital cirucuit |
| 75 | AVSS | — | Ground for analog cirucuit |
| 76 | VREFLAD | — | AD subordinate position standard voltage (0.6±0.1v) |
| 77 | VREFMAD | — | It is a place standard voltage in AD (1.4±0.1V) |
| 78 | VREFHAD | — | High-ranking AD standard voltage (2.2±0.1V) |
| 79 | AVDD | — | Power supply for analog circuit |
| 80 | VREFC(AD12) | I | |
| 81 | JIOUT(AD11) | I | Jitter signal(FEP) |
| 82 | LDCUR(AD10) | I | Laser drive current signal |
| 83 | VREFOP | — | Operation amplifier standard voltage(VREFC) |
| 84 | RFENV(AD9) | I | RFENV(FEP) |
| 85 | N.C.(AD8) | I | Connects with VREFC |
| 86 | N.C.(AD7) | I | Connects with VREFC |
| 87 | TG(AD6) | I | Tangential Phase difference (FEP) |
| 88 | VREFHDA | — | High-ranking AD standard voltage (2.2±0.1V) |
| 89 | VREFMDA | — | It is a place standard voltage in AD (1.4±0.1V) |
| 90 | VREFLDA | — | AD subordinate position standard voltage (0.6±0.1v) |
| 91 | TE(AD5) | I | Tracking error (FEP) |
| 92 | TROFS(AD4) | I | Tracking drive IC input offset |
| 93 | FE(AD3) | I | Focus error (FEP) |

MN67705EA(3/3)

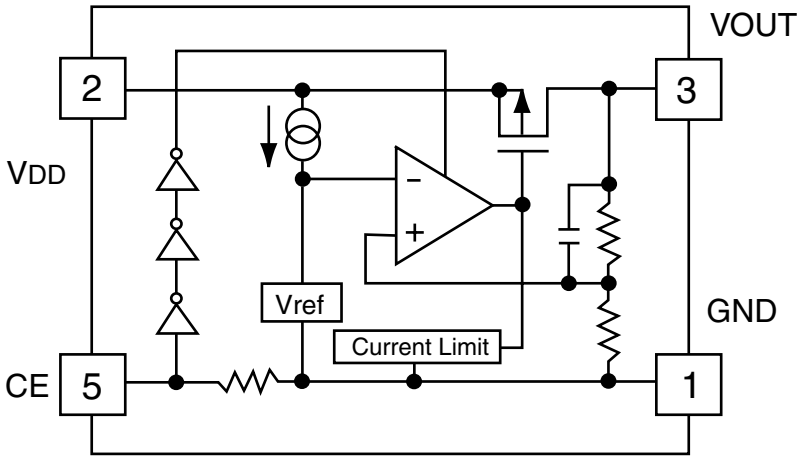
| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 94 | FS(AD2) | I | FS (FEP) |
| 95 | TS(AD1) | I | TS (FEP) |
| 96 | AVSS | — | Ground for analog cirucuit |
| 97 | AVDD | — | Power supply for analog circuit |
| 98 | FBAL(DA1) | O | Focus balance(FEP) |
| 99 | FC(DA2) | O | Cutting off frequency (FEP) |
| 100 | BOOST(DA3) | O | Amount of boost (FEP) |
| 101 | TBAL(DA4) | O | DSL offset balance (FEP) |
| 102 | FODRV(DA5) | O | Focus drive |
| 103 | TRDRV(DA6) | O | Tracking drive |
| 104 | TRSDRVA(DA7) | O | Traverse drive A aspect |
| 105 | TRSDRVB(DA8) | O | Traverse drive B aspect |
| 106 | DVDD | — | Power supply for digital cirucuit |
| 107 | OFTR | I | Off-track error signal (FEP) |
| 108 | TKCRS1 | I | Track crossing signal 1 (FEP) |
| 109 | TKCRS2 | I | Track crossing signal 2 (FEP) |
| 110 | DSLO | I | Binary making data slice signal (FEP) |
| 111 | FG | I | FG signal input (spindle motor driver) |
| 112 | MINTEST | — | Connects with DVSS |
| 113 | TEST | — | Connects with DVSS |
| 114 | XRESET | I | Reset L : Reset |
| 115 | IREF1 | — | VCO reference current 1( for SYSCLK) |
| 116 | DVSS | — | Ground for digital circuit) |
| 117 | VCOF1 | — | VCO control voltage 1 (for SYSCLK) |
| 118 | SYSCLK | I | 33.8MHz system clock input |
| 119 | DVSS | — | Ground for digital circuit |
| 120 | EC(PWM3A) | O | Spindle motor drive |
| 121 | ECR(PWM3B) | O | |
| 122 | N.C.(PWM3A) | O | |
| 123 | N.C.(PWM2B) | O | |
| 124 | N.C.(PWM1A) | O | |
| 125 | CDDVD | O | CD/DVD control signal (FEP) CD : H DVD : L |
| 126 | N.C.(PWM0A) | O | |
| 127 | N.C.(PWM0B) | O | |
| 128 | FEPNTRON | O | Tracking ON (FEP) |

## ■ RN5RZ20BA-X(IC102) : High cycle module

1.Terminal layout




2.Block diagram

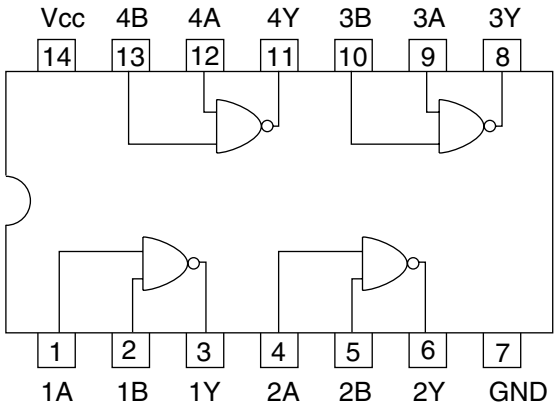



3.Pin function

| Pin No. | Pin name | Function |
|---|---|---|
| 1 | GND | Ground terminal |
| 2 | VDD | Input terminal |
| 3 | VOUT | Output terminal |
| 4 | NC | No connection |
| 5 | CE | Chip enable terminal |

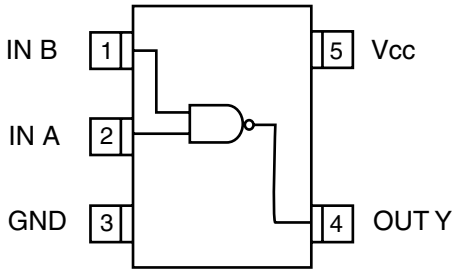
## ■ TC74VHC00FT-X(IC503) : Wright timing control

1.Terminal layout / Block diagram



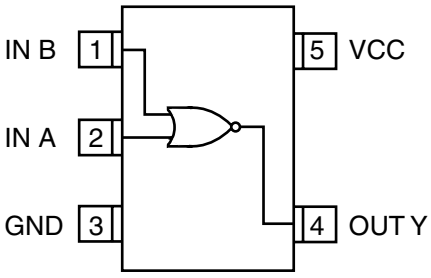

## ■ TC7SH04FU (IC107) :

1. Terminal layout



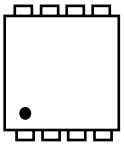

## ■ TC7SH32FU-X(IC312) : Timing control

1.Terminal layout

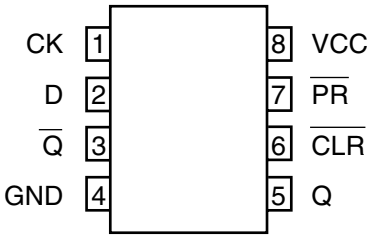



## ■ TC7WH74FU-X(IC374) : Clock buffer

1.Terminal layout

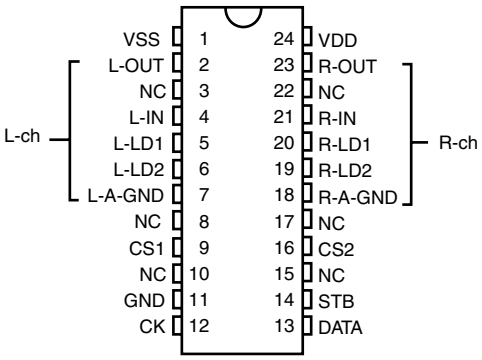


2.Block diagram

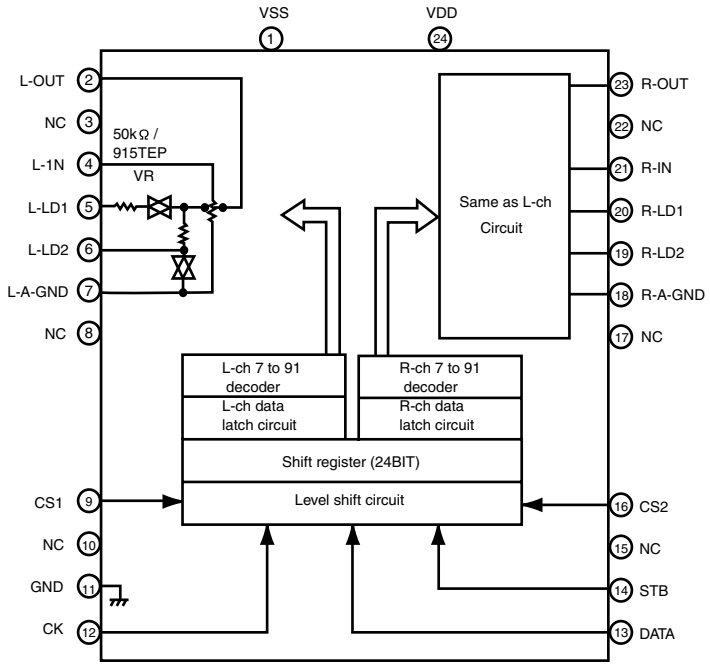


## ■ TC9459F (IC331,IC332,IC333) : Electronic volume control

1.Terminal layout




2. Block diagram

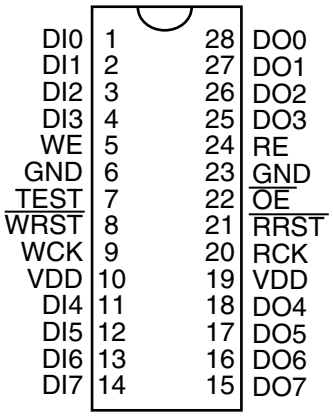



3.Pin function

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | VSS | Negative power supply pin | 13 | DATA | Data input pin |
| 2 | L-OUT | Volume output pin | 14 | STB | Strobe input pin |
| 3 | NC | No connection | 15 | NC | No connection |
| 4 | NC | No connection | 16 | CS2 | Chip select input pin |
| 5 | L-LD1 | Loudness tap output pin | 17 | NC | No connection |
| 6 | L-LD2 | Loudness tap output pin | 18 | R-A-GND | Analog GND pin |
| 7 | L-A-GND | Analog GND pin | 19 | R-LD2 | Loudness tap output pin |
| 8 | NC | No connection | 20 | R-LD1 | Loudness tap output pin |
| 9 | CS1 | Chip select input pin | 21 | R-IN | Volume input pin |
| 10 | NC | No connection | 22 | NC | No connection |
| 11 | NC | No connection | 23 | R-OUT | Volume output pin |
| 12 | CK | Clock input pin | 24 | VDD | Positive power supply pin |

## ■ UPD42280GU-30-X(IC552):2M RAM

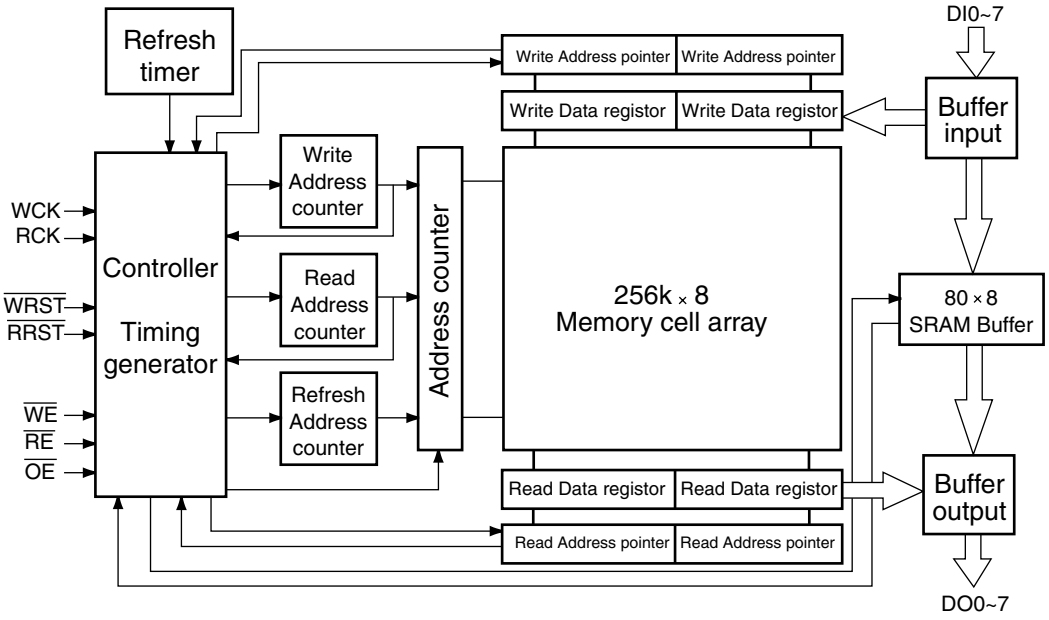
1.Terminal Layout




2.Pin Function

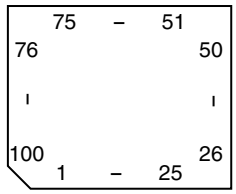
| Pin No. | Symbol | I/O | Pin Function |
|---|---|---|---|
| 1~4 | DI0~3 | I | Data input |
| 5 | WE | I | Write enable signal input |
| 6 | GND | - | Connect to GND |
| 7 | TEST | - | Connect to GND |
| 8 | $\overline{\text{WRST}}$ | I | Write reset signal input |
| 9 | WCK | I | Write clock signal input |
| 10 | VDD | - | Power supply +5V |
| 11~14 | DI4~7 | I | Data input |
| 15~18 | DO7~4 | O | Data output |
| 19 | VDD | - | Power supply +5V |
| 20 | RCK | I | Read clock signal input |
| 21 | $\overline{\text{RRST}}$ | I | Read reset signal input |
| 22 | $\overline{\text{OE}}$ | - | Connect to GND |
| 23 | GND | - | Connect to GND |
| 24 | RE | I | Read enable signal input |
| 25~28 | DO3~0 | O | Data output |

3.Block Diagrams



## ■ UPD784215AGC102(IC671): DSP Controler

1. Terminal layout

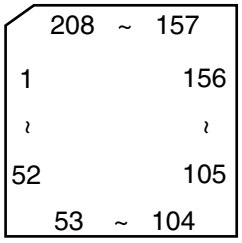



2. Pin function

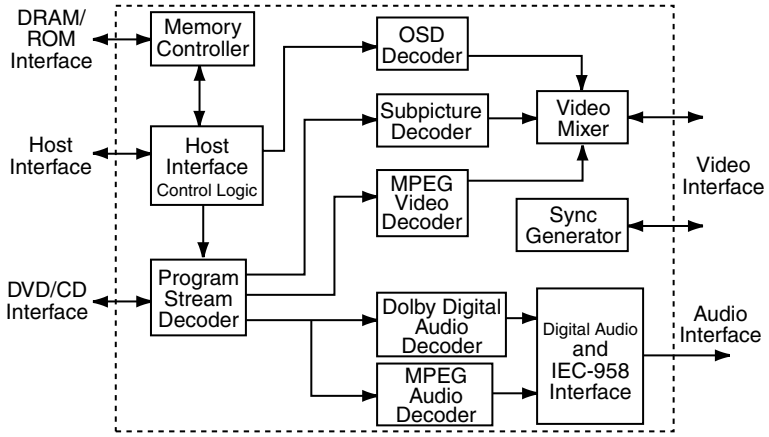
| Pin No. | Symbol | I/O | Functions |
|---|---|---|---|
| 1-8 | | - | Terminal (unused) |
| 9 | VDD | - | Power supply terminal |
| 10 | X2 | O | Quartz oscillation terminal 6.14 MHz (Main clock) |
| 11 | X1 | I | Quartz oscillation terminal 6.14 MHz (Main clock) |
| 12 | VSS | - | Ground connection |
| 13 | XT2 | - | Terminal (unused) |
| 14 | XT1 | - | Terminal (unused) |
| 15 | $\overline{\text{RESET}}$ | I | Reset signal input |
| 16 | $\overline{\text{AUTODATA}}$ | I | DSP general-purpose port output interruption |
| 17 | LOCK | I | DSP general-purpose port output interruption |
| 18 | DIGITAL0 | I | DSP general-purpose port output interruption |
| 19 | FORMAT | I | DSP general-purpose port output interruption |
| 20 | CHANNEL | I | DSP general-purpose port output interruption |
| 21 | ERR | I | DSP general-purpose port output interruption |
| 22 | $\overline{\text{RSTDET}}$ | I | DSP general-purpose port output interruption |
| 23 | AVDD | - | Power supply terminal |
| 24 | AVREF0 | - | Ground connection |
| 25-32 | | - | Ground connection |
| 33 | AVSS | - | Ground connection |
| 34,35 | | - | Terminal (unused) |
| 36 | | - | Power supply terminal |
| 37,38 | RX,TX | - | Terminal (unused) |
| 39 | | - | Terminal (unused) |
| 40 | DSPCOM | I | Communication port with IC401 |
| 41 | DSPSTS | O | Status communication port to IC401 |
| 42 | $\overline{\text{DSPCLK}}$ | I | Clock input from IC401 |
| 43 | DSPRDY | I | Ready signal input from IC401 |
| 44 | | - | Terminal (unused) |
| 45,46 | MIDIO_IN/OUT | I/O | DSP-microcomputer I/F |
| 47 | $\overline{\text{MICK}}$ | O | Clock signal to IC631 |
| 48 | $\overline{\text{MICS}}$ | O | Chip select to IC631 |
| 49 | $\overline{\text{MILP}}$ | O | DSP-microcomputer I/F |
| 50 | $\overline{\text{MIACK}}$ | O | DSP-microcomputer I/F |
| 51,52 | | - | Terminal (unused) |
| 53 | $\overline{\text{DSPRST}}$ | O | DSP reset signal output |
| 54-63 | | - | Terminal (unused) |
| 64,65 | CDTI/CDTO | I/O | CODEC-Microcomputer I/F |
| 66 | $\overline{\text{CCLK}}$ | O | Clock signal to IC601 |
| 67 | $\overline{\text{CS}}$ | O | Chip select to IC601 |
| 68 | XTS | O | OSC select |
| 69,70 | | - | Terminal (unused) |
| 71 | $\overline{\text{PD}}$ | O | Reset signal input |
| 72 | GND | - | Ground connection |
| 73-80 | | - | Terminal (unused) |
| 81 | VDD | - | Power supply terminal |
| 82 | $\overline{\text{3D-ON}}$ | - | Terminal (unused) |
| 83 | 3D-ON | O | Switching terminal to where the surround channel is output |
| 84 | ANA/T-TONE | O | Test tone control |
| 85 | REF-MIX | O | Controlling terminal to where the LFE channel is output |
| 86 | | - | Terminal (unused) |
| 87 | D.MUTE | O | MUTE for the digital OUT terminal |
| 88 | $\overline{\text{S.MUTE}}$ | O | MUTE for the audio signal |
| 89 | | - | Terminal (unused) |
| 90-93 | ASW1-4 | O | Digital input selection |
| 94 | TEST | - | Test terminal |
| 95-100 | | - | Terminal (unused) |

## ■ ZIVA3-PA1(IC501):AV DECODER

1.Terminal Layout




2.Block Diagrams




3.Pin Function (1/3)

| Pin No. | Symbol | I/O | Function | Pin No. | Symbol | I/O | Function |
|---|---|---|---|---|---|---|---|
| 1 | TEST PINO | - | Test pin | 26 | ARAM-DATA5 | I/O | Non used |
| 2 | HDATA0 | I/O | System control data I/O (IC301) | 27 | E-VDD | - | Power supply |
| 3 | HDATA1 | I/O | System control data I/O (IC301) | 28 | ARAM-DATA6 | I/O | Non used |
| 4 | HDATA2 | I/O | System control data I/O (IC301) | 29 | E-VSS | - | Connect to GND |
| 5 | E-VDD | - | Power supply | 30 | ARAM-DATA7 | I/O | Non used |
| 6 | HDATA3 | I/O | System contorl data I/O (IC301) | 31 | ARAM-ADDR0 | - | Connect to TP550 |
| 7 | E-VSS | - | Connect to GND | 32 | ARAM-ADDR1 | - | Connect to TP551 |
| 8 | HDATA4 | I/O | System control data I/O (IC301) | 33 | ARAM-ADDR2 | - | Connect to TP552 |
| 9 | HDATA5 | I/O | System control data I/O (IC301) | 34 | ARAM-ADDR3 | - | Connect to TP553 |
| 10 | HDATA6 | I/O | System control data I/O (IC301) | 35 | ARAM-ADDR4 | - | Connect to TP554 |
| 11 | HDATA7 | I/O | System control data I/O (IC301) | 36 | E-VDD | - | Power supply |
| 12 | I-VDD | - | Power supply | 37 | ARAM-ADDR5 | - | Connect to TP555 |
| 13 | $\overline{\text{RST}}$ | I | Reset signal input | 38 | E-VSS | - | Connect to GND |
| 14 | I-VSS | - | Connect to GND | 39 | ARAM-ADDR6 | - | Connect to TP556 |
| 15 | $\overline{\text{WAIT}}$ | I | Wait control for IC509 | 40 | I-VDD | - | Power supply |
| 16 | $\overline{\text{INT}}$ | O | Host interrupt output for ATAPI | 41 | ARAM-ADDR7 | - | Connect to TP557 |
| 17 | E-VDD | - | Power supply | 42 | I-VSS | - | Connect to GND |
| 18 | $\overline{\text{ARAM-OE}}$ | - | Connect to TP540 | 43 | ARAM-ADDR8 | - | Connect to TP558 |
| 19 | E-VSS | - | Connect to GND | 44 | ARAM-ADDR9 | - | Connect to TP559 |
| 20 | $\overline{\text{ARAM-WE}}$ | - | Connect to TP541 | 45 | ARAM-ADDR10 | - | Connect to TP560 |
| 21 | ARAM-DATA0 | I/O | Non used | 46 | ARAM-ADDR11 | - | Connect to TP561 |
| 22 | ARAM-DATA1 | I/O | Non used | 47 | E-VDD | - | Power supply |
| 23 | ARAM-DATA2 | I/O | Non used | 48 | ARAM-ADDR12 | - | Connect to TP562 |
| 24 | ARAM-DATA3 | I/O | Non used | 49 | E-VSS | - | Connect to GND |
| 25 | ARAM-DATA4 | I/O | Non used | 50 | ARAM-ADDR13 | - | Connect to TP563 |

Pin Function (2/3)

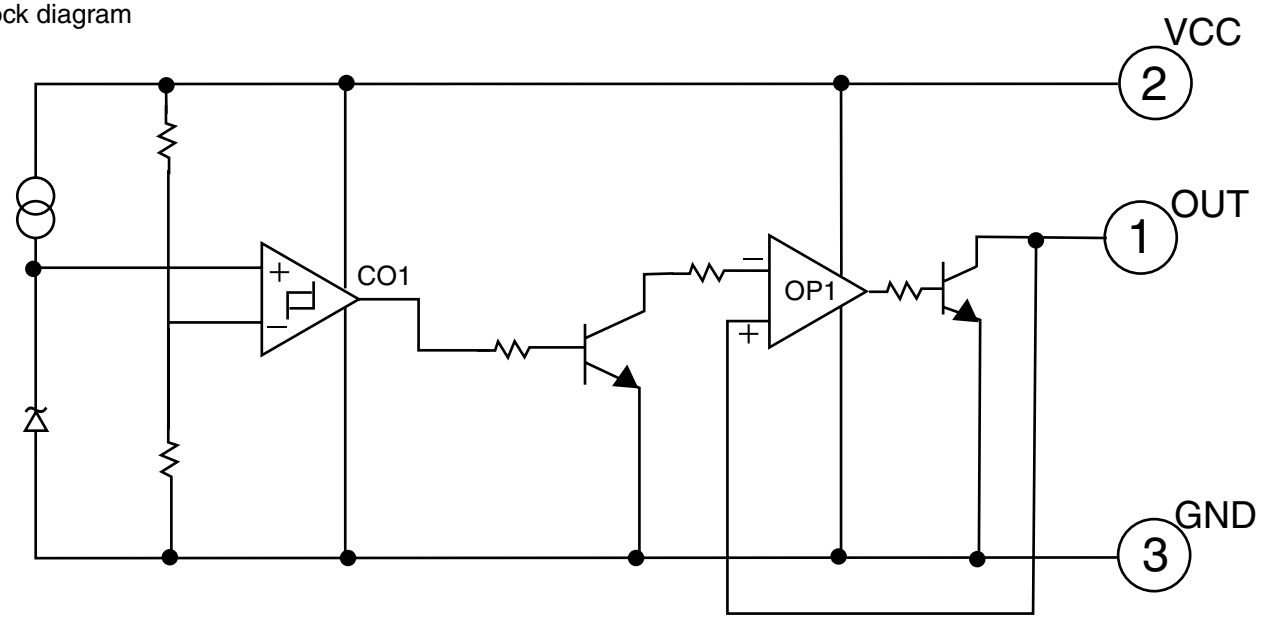
| Pin No. | Symbol | I/O | Function | Pin No. | Symbol | I/O | Function |
|---|---|---|---|---|---|---|---|
| 51 | ARAM-ADDR14 | - | Connect to TP564 | 97 | E-VSS | - | Connect to GND |
| 52 | TEST-PIN1 | - | Test pin | 98 | M-ADDR11 | O | Address output to IC508,504 |
| 53 | M-DATA15 | I/O | Data bus I/O to IC508,IC504 | 99 | M-ADDR8 | O | Address output to IC508,504 |
| 54 | M-DATA0 | I/O | Data bus I/O to IC508,IC504 | 100 | M-ADDR10 | O | Address output to IC508,504 |
| 55 | E-VDD | - | Power supply | 101 | E-VDD | - | Power supply |
| 56 | M-DATA14 | I/O | Data bus I/O to IC508,IC504 | 102 | M-ADDR7 | O | Address output to IC508,504 |
| 57 | E-VSS | - | Connect to GND | 103 | E-VSS | - | Connect to GND |
| 58 | M-DATA1 | I/O | Data bus I/O to IC508,IC504 | 104 | M-ADDR0 | O | Address output to IC508,504 |
| 59 | M-DATA13 | I/O | Data bus I/O to IC508,IC504 | 105 | M-ADDR6 | O | Address output to IC508,504 |
| 60 | M-DATA2 | I/O | Data bus I/O to IC508,IC504 | 106 | M-ADDR1 | O | Address output to IC508,504 |
| 61 | E-VDD | - | Power supply | 107 | E-VDD | - | Power supply |
| 62 | M-DATA12 | I/O | Data bus I/O to IC508,IC504 | 108 | M-ADDR5 | O | Address output to IC508,504 |
| 63 | E-VSS | - | Connect to GND | 109 | E-VSS | - | Connect to GND |
| 64 | M-DATA3 | I/O | Data bus I/O to IC508,IC504 | 110 | M-ADDR2 | O | Address output to IC508,504 |
| 65 | I-VDD | - | Power supply | 111 | M-ADDR4 | O | Address output to IC508,504 |
| 66 | M-DATA11 | I/O | Data bus I/O to IC508,IC504 | 112 | M-ADDR3 | O | Address output to IC508,504 |
| 67 | I-VSS | - | Connect to GND | 113 | E-VDD | - | Power supply |
| 68 | M-DATA14 | I/O | Data bus I/O to IC508,IC504 | 114 | M-ADDR12 | - | Connect to TP513 |
| 69 | E-VDD | - | Power supply | 115 | E-VSS | - | Connect to GND |
| 70 | M-DATA10 | I/O | Data bus I/O to IC508,IC504 | 116 | M-ADDR13 | - | Connect to TP514 |
| 71 | E-VSS | - | Connect to GND | 117 | I-VDD | - | Power supply |
| 72 | M-DATA5 | I/O | Data bus I/O to IC508,IC504 | 118 | M-ADDR14 | - | Connect to TP515 |
| 73 | M-DATA9 | I/O | Data bus I/O to IC508,IC504 | 119 | I-VSS | - | Connect to GND |
| 74 | M-DATA6 | I/O | Data bus I/O to IC508,IC504 | 120 | M-ADDR15 | - | Connect to TP516 |
| 75 | E-VDD | - | Power supply | 121 | M-ADDR16 | - | Connect to TP517 |
| 76 | M-DATA8 | I/O | Data bus I/O to IC508,IC504 | 122 | M-ADDR17 | - | Connect to TP518 |
| 77 | E-VSS | - | Connect to GND | 123 | E-VDD | - | Power supply |
| 78 | M-DATA7 | I/O | Data bus I/O to IC508,IC504 | 124 | M-ADDR18 | - | Connect to TP519 |
| 79 | LDQM | O | Lower DQ mask enable | 125 | E-VSS | - | Connect to GND |
| 80 | UDQM | O | Upper DQ mask enable | 126 | M-ADDR19 | - | Connect to TP520 |
| 81 | E-VDD | - | Power supply | 127 | M-ADDR20 | - | Connect to TP521 |
| 82 | $\overline{\text{MWE}}$ | O | Write enable | 128 | $\overline{\text{ROM-CS}}$ | - | Connect to TP522 |
| 83 | E-VSS | - | Connect to GND | 129 | TEST-PIN2 | - | Test pin |
| 84 | SD-CLK | O | System clock signal output | 130 | OSD-CLK | - | Connect to TP523 |
| 85 | $\overline{\text{SD-CAS}}$ | O | column address strobe | 131 | OSD-DATA0 | - | Connect to TP525 |
| 86 | $\overline{\text{SD-RAS}}$ | O | Row address strobe | 132 | OSD-DATA1 | - | Connect to TP526 |
| 87 | E-VDD | - | Power supply | 133 | TEST-PIN3 | - | Test pin |
| 88 | $\overline{\text{SD-CS1}}$ | O | Chip select output to IC508 | 134 | E-VDD | - | Power supply |
| 89 | E-VSS | - | Connect to GND | 135 | OSD-DATA2 | - | Connect to TP528 |
| 90 | $\overline{\text{SD-CSO}}$ | O | Chip select output to IC504 | 136 | E-VSS | - | Connect to GND |
| 91 | I-VDD | - | Power supply | 137 | OSD-DATA3 | - | Connect to TP529 |
| 92 | $\overline{\text{EDO-CAS}}$ | - | Connect to TP511 | 138 | TEST-PIN4 | - | Test pin |
| 93 | I-VSS | - | Connect to GND | 139 | OSD-BLK1 | - | Connect to TP531 |
| 94 | $\overline{\text{EDO-RAS}}$ | - | Connect to TP512 | 140 | OSDVC1 | - | Connect to TP532 |
| 95 | E-VDD | - | Power supply | 141 | TEST-PIN5 | - | Test pin |
| 96 | M-ADDR9 | O | Address output to IC508,504 | 142 | VDATA0 | O | DVD image signal output |

Pin Function (3/3)

| Pin No. | Symbol | I/O | Function | Pin No. | Symbol | I/O | Function |
|---|---|---|---|---|---|---|---|
| 143 | VDATA1 | O | DVD image signal output | 176 | A-VDD | - | Connect to TP507 |
| 144 | I-VDD | - | Power supply | 177 | VCLK | I/O | Dot clock signal output (27MHz) |
| 145 | VDATA2 | O | DVD image signal output | 178 | SYSCLK | - | Connect to TP505 |
| 146 | I-VSS | - | Connect to GND | 179 | A-VSS | - | Connect to GND |
| 147 | TEST-PIN6 | - | Test pin | 180 | DVD-DATA0 | I | ATAPI data I/O to IC301 |
| 148 | VDATA3 | O | DVD image signal output | 181 | E-VDD | - | Power supply |
| 149 | E-VDD | - | Power supply | 182 | DVD-DATA1 | I | ATAPI data I/O to IC301 |
| 150 | VDATA4 | O | DVD image signal output | 183 | E-VSS | - | Connect to GND |
| 151 | E-VSS | - | Connect to GND | 184 | DVD-DATA2 | I | ATAPI data I/O to IC301 |
| 152 | VDATA5 | O | DVD image signal output | 185 | DVD-DATA3 | I | ATAPI data I/O to IC301 |
| 153 | TEST-PIN7 | - | Test pin | 186 | DVD-DATA4 | I | ATAPI data I/O to IC301 |
| 154 | VDATA6 | O | DVD image signal output | 187 | DVD-DATA5 | I | ATAPI data I/O to IC301 |
| 155 | VDATA7 | O | DVD image signal output | 188 | DVD-DATA6 | I | ATAPI data I/O to IC301 |
| 156 | TEST-PIN8 | - | Test pin | 189 | DVD-DATA7 | I/O | ATAPI data I/O to IC301 |
| 157 | $\overline{\text{HSYNC}}$ | I/O | Horizontal synchronous signal output | 190 | TEST-PIN10 | - | Test pin |
| 158 | $\overline{\text{VSYNC}}$ | I/O | Vertical synchronous signal output | 191 | V-REQUEST | O | Master/Sleave Selection for ATAPI |
| 159 | IEC-958 | O | Digital audio data output | 192 | V-STROBE | I | Host address for ATAPI |
| 160 | E-VDD | - | Power supply | 193 | I-VDD | - | Power supply |
| 161 | DA-DATA0 | O | Data output to IC702 | 194 | A-REQUEST | - | Connect to TP539 |
| 162 | E-VSS | - | Connect to GND | 195 | I-VSS | - | Connect to GND |
| 163 | DA-DATA1 | O | Data output to IC702 | 196 | V-DACK | I | Host interrupt input for ATAPI |
| 164 | DA-DATA2 | O | Data output to IC702 | 197 | E-VDD | - | Power supply |
| 165 | DA-DATA3 | O | Data output to IC702 | 198 | SECT-SYNC | I | Host write for ATAPI |
| 166 | DA-LRCK | O | L/R clock output to IC702 | 199 | E-VSS | - | Connect to GND |
| 167 | DA-BCK | O | Bit clock output to IC702 | 200 | ERROR | - | Connect to GND |
| 168 | I-VDD | - | Power supply | 201 | HOST-SEL | - | Connect to GND |
| 169 | DA-XCK | - | Non connect | 202 | HADDR0 | I | System control address input |
| 170 | I-VSS | - | Connect to GND | 203 | HADDR1 | I | System control address input |
| 171 | DAI-DATA | - | Connect to TP501 | 204 | HADDR2 | I | System control address input |
| 172 | DAI-LRCK | I | L/R clock input from IC702 | 205 | DTACK-SEL | - | Connect to GND |
| 173 | DAI-BCK | I | Bit clock input from IC702 | 206 | $\overline{\text{CS}}$ | I | Chip select for ZIVA |
| 174 | TEST-PIN9 | - | Test pin | 207 | $\overline{\text{R/W}}$ | I | Write enable |
| 175 | CLK-SEL | - | Connect to GND | 208 | $\overline{\text{RD}}$ | I | Read enable |

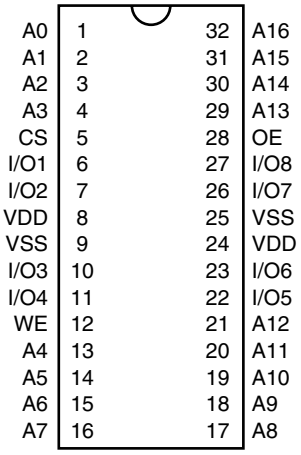
## ■ IC-PST9140-T (IC717) : RESET IC

1. biock diagram

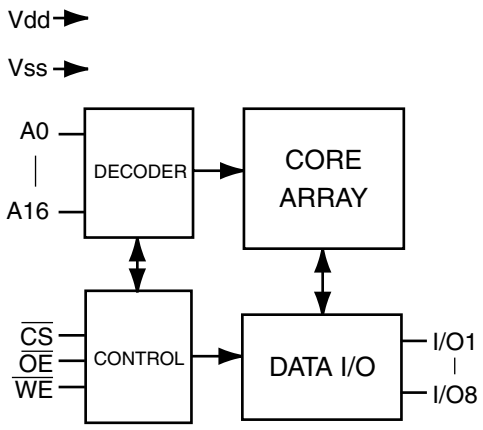



## ■ W24L011AJ-15(IC641): SDRAM

1. Terminal layout




2. Block diagram

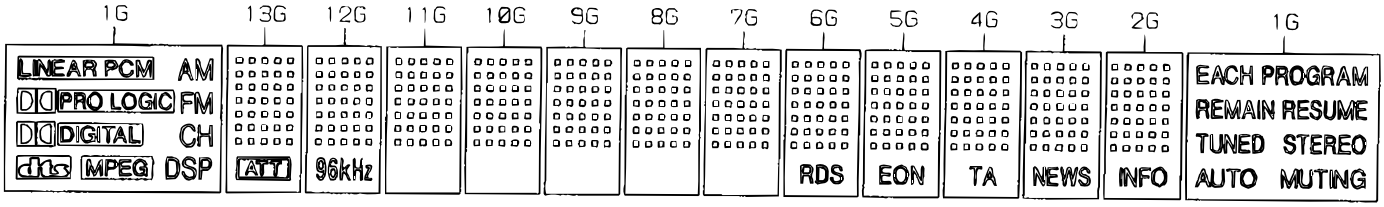


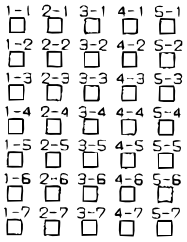

3. Pin function

| Symbol | Description |
|---|---|
| A0-A16 | Address input |
| I/O1-I/O8 | Data input/output |
| CS | Chip select input |
| WE | Write enable input |
| OE | Output enable input |
| Vdd | Power supply terminal |
| Vss | Ground connection |

# Internal connection of FL display tube

## ■ QLF0049-001(DI831):FL DISPLAY TUBE




PIN CONNECTION

| PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONNECTION | F1 | F2 | NP | NC | NC | NC | NC | NC | NC | P36 | P35 | P34 | P33 | P32 | P31 | P30 | P29 | P28 | P27 | P26 | P25 | P24 | P23 | P22 | P21 | P20 | P19 | P18 | P17 | P16 | P15 | P14 | P13 | P12 | P11 | P10 | P9 | P8 | P7 | P6 | P5 | P4 | P3 | P2 | P1 | NC | 13G | 12G | 11G | 10G | 9G |

| PIN NO. | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONNECTION | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G | NP | NP | F2 | F2 |

NOTE
1) F1,F2 --- Filament
2) NP ------ No pin
3) NC ------ No connection
4) DL ------ Datum Line
5) 1G~13G --- Grid

ANODE CONNECTION

| | 13G | 12G | 11G | 10G | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | EACH |
| P2 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | 2-1 | PROGRAM |
| P3 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | 3-1 | REMAIN |
| P4 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | 4-1 | RESUME |
| P5 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | 5-1 | TUNED |
| P6 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | 1-2 | STEREO |
| P7 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | AUTO |
| P8 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | 3-2 | MUTING |
| P9 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | 4-2 | LINEAR PCM |
| P10 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | 5-2 | AM |
| P11 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | DOLBY PRO LOGIC |
| P12 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | FM |
| P13 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | 3-3 | DOLBY DIGITAL |
| P14 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | 4-3 | CH |
| P15 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | 5-3 | dts |
| P16 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | 1-4 | MPEG |
| P17 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | 2-4 | DSP |
| P18 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | - |
| P19 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | 4-4 | - |
| P20 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | 5-4 | - |
| P21 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | - |
| P22 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | - |
| P23 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | 3-5 | - |
| P24 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | 4-5 | - |
| P25 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | 5-5 | - |
| P26 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | 1-6 | - |
| P27 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | 2-6 | - |
| P28 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 | - |
| P29 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | - |
| P30 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | 5-6 | - |
| P31 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | 1-7 | - |
| P32 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | 2-7 | - |
| P33 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | 3-7 | - |
| P34 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | 4-7 | - |
| P35 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | 5-7 | - |
| P36 | ATT | 96kHz | - | - | - | - | - | RDS | EON | TA | NEWS | INFO | - |

JVC

**VICTOR COMPANY OF JAPAN, LIMITED**
OPTICAL DISC BUSINESS DIV. PERSONAL & MOBILE NETWORK BUSINESS UNIT
AV & MULTIMEDIA COMPANY 1644, Shimotsuruma, Yamato, Kanagawa 242-8514, Japan

No.20872

Printed in Japan
200009(S)

# PARTS LIST

## [ XV-THA10R ]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

B ---------- U.K.
E ---------- Continental Europe
EN ---------- Northern Europe
EE ---------- Russian Federation

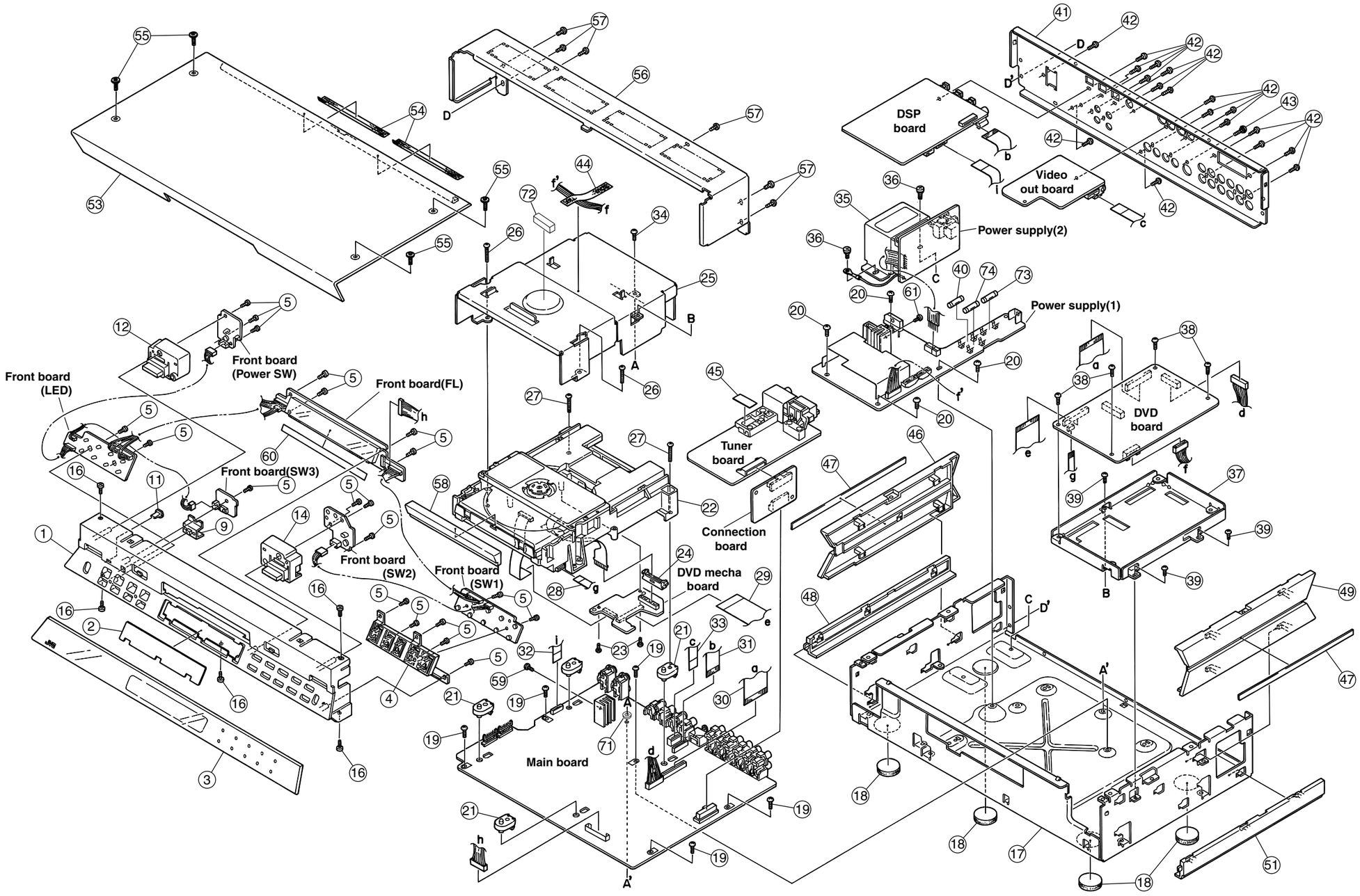
- Contents -

Exploded view of general assembly and parts list ---------- 3-3
DVD mechanism assembly and parts list ---------- 3-5
Electrical parts list ---------- 3-7
Packing materials and accessories parts list ---------- 3-24

# — MEMO —

# Exploded view of general assembly and parts list

Block No. M 1 M M



## ■ Parts list (General assembly)

Block No. M1MM

| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | 1 | LV10334-005A | FRONT BASE | 1 | | |
| | 2 | LV41540-001A | FL SCREEN | 1 | FRONT BASE | |
| | 3 | LV20644-003A | LENS | 1 | | |
| | 4 | LV20648-001A | PUSH BUTTON | 1 | | |
| | 5 | QYSDSF2606Z | SCREW | 20 | | |
| | 9 | LV41541-001A | REMOTE LENS | 1 | | |
| | 11 | FSJD4001-002 | INDICATOR | 1 | | |
| | 12 | LV31711-001A | P.BUTTON ASSY | 1 | | |
| | 14 | LV31714-001A | EJECT B.ASSY | 1 | | |
| | 16 | QYSDSG3008M | SCREW | 5 | FRONT+CHASSIS | |
| | 17 | LV10336-001A | CHASSIS BASE | 1 | | |
| | 18 | LV41539-001A | SPACER | 4 | FOOT | |
| | 19 | QYSBSG3008E | T.SCREW | 5 | MAIN PWB+CHASSI | |
| | 20 | QYSBSG3008E | T.SCREW | 4 | POW.PWB+CHASSIS | |
| | 21 | LV31717-001A | STAND | 4 | | |
| | 22 | ------ | DVD DRIVE MECHA | 1 | | |
| | 23 | QYSBSF2006Z | SCREW | 2 | FOR MECHA+PWB | |
| | 24 | LV31435-001A | CONECTOR HOLDER | 1 | | |
| | 25 | LV20640-001A | SHIELD PLATE | 1 | | |
| | 26 | QYSBST3018E | T.SCREW | 2 | MECHA+SHIELD+CA | |
| | 27 | QYSBST3016Z | T.SCREW | 2 | MECHA+CHASSIS | |
| | 28 | QUQ810-0715AJ | FFC WIRE | 1 | MECHA FP2602-CN | |
| | 29 | QUQ810-3717AM | FFC WIRE | 1 | MECHA CN11-DVD | |
| | 30 | QUQ810-3512AM | FFC WIRE | 1 | MAIN CN801-DVD | |
| | 31 | QUQ810-1916AJ | FFC WIRE | 1 | MAIN CN151-DSP | |
| | 32 | QUQ810-1318AJ | FFC WIRE | 1 | MAIN CN804-DSP | |
| | 33 | QUQB12-1012AJ | FFC WIRE | 1 | MAIN CN231-SV C | |
| | 34 | QYSBSG3008E | T.SCREW | 1 | MECHA+SHIELD+CA | |
| ⚠ | 35 | QQT0296-003 | POWER TRANS | 1 | T901 | |
| | 36 | QYSDSTL4008E | SPECIAL SCREW | 2 | TRANS+CHASSIS | |
| | 37 | LV31718-001A | SHIELD CASE | 1 | | |
| | 38 | QYSBSG3006E | T.SCREW | 4 | DVD PWB+S.CASE | |
| | 39 | QYSBST3004Z | T.SCREW | 3 | S.CASE+CHASSIS | |
| ⚠ | 40 | QMF51E2-2R0-J1 | FUSE | 1 | F901 | |
| | 41 | LV20642-012A | REAR PANEL | 1 | | B,E,EN |
| | | LV20642-013A | REAR PANEL | 1 | | EE |
| | 42 | QYSBSGY3008E | SPECIAL SCREW | 18 | | |
| | 43 | E73562-003 | SPECIAL SCREW | 1 | SUB WOOFER+REAR | |
| | 44 | LV30225-079A | SPACER | 1 | SHIELD PLATE | |
| | 45 | LV30225-081A | SPACER | 1 | TUNER PWB | |
| | 46 | LV20645-002A | SIDE PANEL(L) | 1 | | |
| | 47 | LV41542-001A | SIDE PLATE | 2 | | |
| | 48 | LV31719-002A | SIDE COVER(L) | 1 | | |
| | 49 | LV20646-002A | SIDE PANEL(R) | 1 | | |
| | 51 | LV31720-002A | SIDE COVER(R) | 1 | | |
| | 53 | LV10335-001A | TOP PANEL | 1 | | |
| | 54 | LV30225-062A | SPACER | 2 | TOP PANEL | |
| | 55 | LV41834-001A | SPECIAL SCREW | 4 | TOP PANEL+CHASS | |

## ■ Parts list (General assembly)

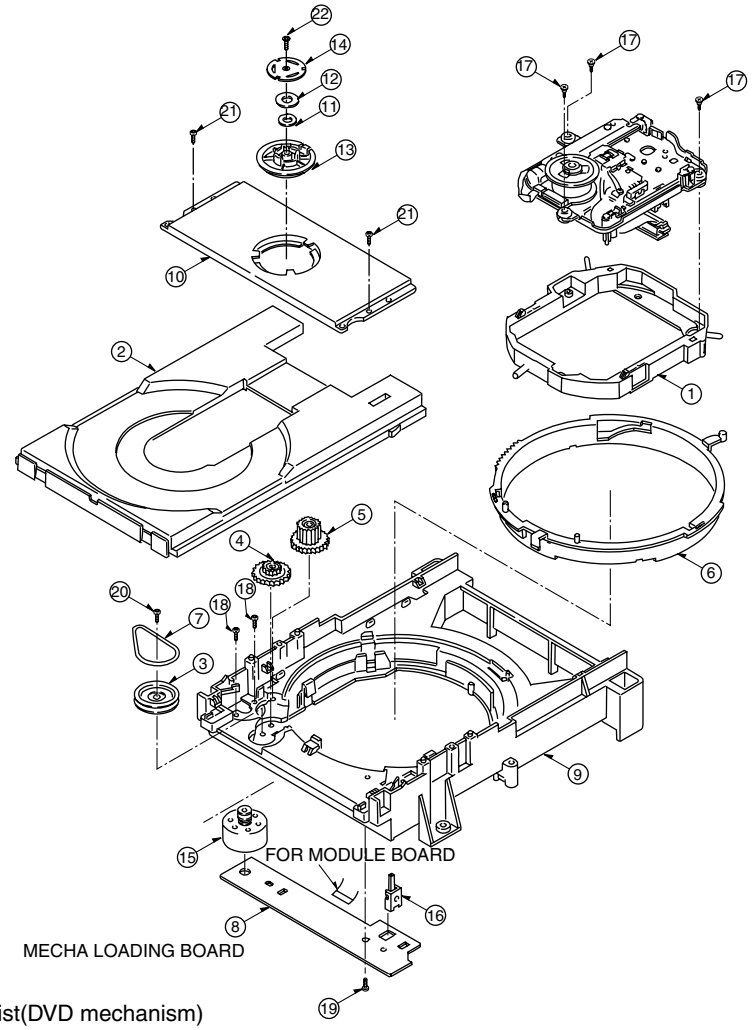
Block No. M1MM

| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | 56 | LV20643-001A | REAR COVER | 1 | | |
| | 57 | QYSBSGY3008E | SPECIAL SCREW | 6 | R.COVER+CHASSI | |
| | 58 | LV20647-001A | TRAY FITTING | 1 | | |
| | 59 | QYSBSG3008Z | T.SCREW | 1 | IC156 + HS156 | |
| | 60 | LV30225-070A | SPACER | 1 | FOR DI701+BK701 | |
| | 61 | QYSBSG3008Z | T.SCREW | 1 | Q921+HS921 | |
| | 71 | E73967-006 | SPACER | 1 | | |
| | 72 | LV41956-001A | SHIELD GASKET | 1 | | |
| ⚠ | 73 | QMF51E2-R50-J1 | FUSE | 1 | F902 | |
| ⚠ | 74 | QMF51E2-R50-J1 | FUSE | 1 | F903 | |

# DVD mechanism assembly and parts list

Block No. M 2 M M

1/2
FLM-V3




■ Parts list(DVD mechanism)

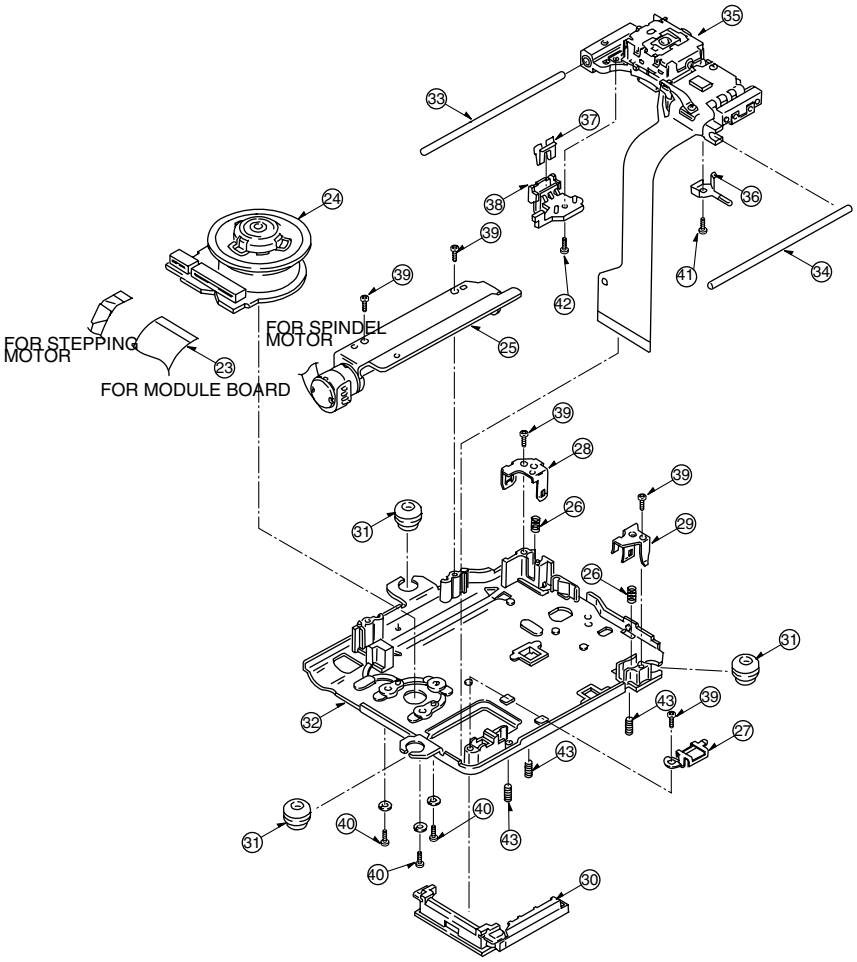
| ⚠ | REF. | PARTS NO. | PARTS NAME | QTY | SUFFIX |
|---|---|---|---|---|---|
| | 1 | GMVMD3270 | Chassis | 1 | |
| | 2 | GMVMD3265 | Tray | 1 | |
| | 3 | GMVDG1308 | Pulley gear | 1 | |
| | 4 | GMVDG1309 | Drive gear 1 | 1 | |
| | 5 | GMVDG1310 | Drive gear 2 | 1 | |
| | 6 | GMVDK0156 | UP DOWN cam | 1 | |
| | 7 | GMVDV0373 | Belt | 1 | |
| | 8 | ---------- | Mecha roading p.c.Board | 1 | |
| | 9 | GMVMD3266 | Roading Base | 1 | |
| | 10 | GMVMD3263 | Clampe base | 1 | |
| | 11 | GMJSM0048 | Magnet | 1 | |
| | 12 | GMVMA9535 | Clamp back yoke | 1 | |
| | 13 | GMVMD3264 | Clamper | 1 | |
| | 14 | GMVMA0B93 | Clamper weight | 1 | |
| | 15 | GMVEM0664 | Roading motor unit | 1 | |
| | 16 | GMVSH0170 | Twin switch | 1 | |
| | 17 | GMVHD1223 | Screw 1 | 3 | |
| | 18 | GMXQNQC17+3 | Screw 2 | 2 | |
| | 19 | GMXTV3+10G | Screw 3 | 1 | |
| | 20 | GMXTW2+12T | Screw 4 | 1 | |
| | 21 | GMXTV3+10G | Screw 5 | 2 | |
| | 22 | GMXTS3+6J | Screw 6 | 1 | |

# DVD mechanism assembly and parts list

Block No. M 2 M M

2/2

FML-V3




■ **Parts list(DVD mechanism)**

| ⚠ | REF. | PARTS NO. | PARTS NAME | QTY | SUFFIX |
|---|---|---|---|---|---|
| | 23 | GMVWJ1277 | Spindle FFC | 1 | |
| | 24 | GMVEM0665 | Spindle motor unit | 1 | |
| | 25 | GMVEM0666 | Stepping motor unit | 1 | |
| | 26 | GMVMB3278 | Tilt spring 1 | 2 | |
| | 27 | GMVMC1487 | Tilt spring 2 | 1 | |
| | 28 | GMVMC1488 | Spring suppresses 1 | 1 | |
| | 29 | GMVMC1489 | Spring suppresses 2 | 1 | |
| | 30 | GMVMD3261 | FPC holder | 1 | |
| | 31 | GMVMG1166 | Floating rubber | 3 | |
| | 32 | GMVMK0474 | Travarse shasshis | 1 | |
| | 33 | GMVMS6471 | Guide shaft 1 | 1 | |
| | 34 | GMVMS6472 | Guide shaft 2 | 1 | |
| | 35 | GMVED0402 | Optical pick up | 1 | |
| | 36 | GMVMC1491 | Spring | 1 | |
| | 37 | GMVMC1490 | Nut spring | 1 | |
| | 38 | GMVMD3260 | Nut | 1 | |
| | 39 | GMVHD1224 | Screw 1 | 5 | |
| | 40 | GMVHD1225 | Screw 2 | 3 | |
| | 41 | GMVHD1057 | Screw 3 | 1 | |
| | 42 | GMXQNQC17+3 | Screw 4 | 1 | |
| | 43 | GMXXE26C6FN | Screw 5 | 3 | |

# Electrical parts list

■ **Electrical parts list (Main board)** **Block No. 01**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 231 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 232 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 233 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 234 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 235 | QCS11HJ-470 | C CAPACITOR | 47PF 5% 50V | |
| | C 236 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 237 | QDX31EM-473Z | C.CAPACITOR | | |
| | C 241 | QETN1AM-107Z | E CAPACITOR | 100MF 20% 10V | |
| | C 242 | QDYB1CM-103Y | C.CAPACITOR | | |
| | C 243 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C 244 | QDYB1CM-103Y | C.CAPACITOR | | |
| | C 245 | QETN1AM-107Z | E CAPACITOR | 100MF 20% 10V | |
| | C 253 | QDX31EM-104Z | C.CAPACITOR | | |
| | C 254 | QCS11HJ-100 | C CAPACITOR | 10PF 5% 50V | |
| | C 255 | QCS11HJ-470 | C CAPACITOR | 47PF 5% 50V | |
| | C 256 | QCS11HJ-121 | C CAPACITOR | 120PF 5% 50V | |
| | C 258 | QDYB1CM-103Y | C.CAPACITOR | | |
| | C 261 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 262 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 271 | QCS11HJ-121 | C CAPACITOR | 120PF 5% 50V | |
| | C 272 | QCS11HJ-470 | C CAPACITOR | 47PF 5% 50V | |
| | C 273 | QCS11HJ-100 | C CAPACITOR | 10PF 5% 50V | |
| | C 291 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C 298 | QDGB1HK-102Y | C CAPACITOR | | |
| | C 299 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 801 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 802 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 806 | QEZ0229-479Z | EDL.CAPACITOR | 47000MF | |
| | C 807 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 811 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 812 | QCBB1HK-473Y | C CAPACITOR | .047MF 10% 50V | |
| | C 813 | QEKC1AM-107Z | E.CAPACITOR | 100MF 20% 10V | |
| | C 814 | QEZ0229-479Z | EDL.CAPACITOR | 47000MF | |
| | C 816 | QEKC0JM-227Z | E.CAPACITOR | 220MF 20% 6.3V | |
| | C 817 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 821 | QDYB1CM-103Y | C.CAPACITOR | | |
| | C 822 | QEKC1HM-225Z | E.CAPACITOR | 2.2MF 20% 50V | |
| | C 823 | QDGB1HK-102Y | C CAPACITOR | | |
| | C 824 | QDVB1EZ-223Y | C CAPACITOR | | |
| | C 826 | QETN1HM-224Z | E CAPACITOR | .22MF 20% 50V | |
| | C 827 | QETN1HM-105Z | E CAPACITOR | 1.0MF 20% 50V | |
| | C 831 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 832 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 835 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 836 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 871 | QCZ0205-155Z | ML C CAPACITOR | 1.5MF | |
| | C 905 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 906 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | CN131 | QGB2501K2-10 | B TO B CONNE | | |
| | CN132 | QGB2501K1-04 | CONNECTOR | | |
| | CN133 | QGB2501J1-12 | CONNECTOR | | |
| | CN134 | QGB2501J1-04 | CONNECTOR | | |
| | CN151 | QGF1016C1-19 | CONNECTOR | | |
| | CN231 | QGF1205C1-10 | CONNECTOR | | |
| | CN801 | QGF1016C1-35 | FFC/FPC CONNE | DVD-MAIN | |
| | CN802 | QGA2001C1-15 | 15P PLUG ASSY | MAIN-FL | |
| | CN804 | QGF1016C1-13 | CONNECTOR | DSP-MAIN | |
| | CN805 | QGB2501J1-10 | B TO B CONNE | | |
| | CN806 | QGB2501J1-04 | CONNECTOR | | |
| | CN807 | QGB2011MP-08 | B TO B CONNE | | |
| | CN808 | QGB2011MP-08 | B TO B CONNE | | |
| | C1101 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1102 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C1103 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1104 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1105 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1106 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1107 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1108 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1109 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1110 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1111 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1112 | QCBB1HK-331Y | C CAPACITOR | 330PF 10% 50V | |
| | C1115 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1116 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1117 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C1118 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C1121 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1122 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1123 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1124 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1125 | QFLC1HJ-821Z | M.CAPA.I.M | 820PF 5% 50V | |
| | C1126 | QFLC1HJ-821Z | M.CAPA.I.M | 820PF 5% 50V | |
| | C1127 | QFVJ1HJ-224Z | CAPACITOR | .22MF 5% 50V | |
| | C1128 | QFVJ1HJ-224Z | CAPACITOR | .22MF 5% 50V | |
| | C1131 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1132 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1133 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1134 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1135 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1136 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1137 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1138 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1139 | QFVJ1HJ-224Z | CAPACITOR | .22MF 5% 50V | |
| | C1140 | QFVJ1HJ-224Z | CAPACITOR | .22MF 5% 50V | |
| | C1151 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1152 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1155 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1156 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1159 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1160 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1161 | QCBB1HK-561Y | C CAPACITOR | 560PF 10% 50V | |
| | C1162 | QCBB1HK-561Y | C CAPACITOR | 560PF 10% 50V | |
| | C1163 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1164 | QETN1AM-107Z | E CAPACITOR | 100MF 20% 10V | |
| | C1165 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1166 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1167 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C1169 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1170 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1171 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C1173 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1174 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1175 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C1176 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1177 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1178 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1179 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1180 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1181 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C1182 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1183 | QETN1HM-106Z | E CAPACITOR | 10MF 20% 50V | |
| | C1201 | QTE1H06-475Z | E CAPACITOR | | |
| | C1202 | QTE1H06-475Z | E CAPACITOR | | |
| | C1203 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1204 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |

■ **Electrical parts list (Main board)** **Block No. 01**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C1205 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1206 | QTE1H06-475Z | E CAPACITOR | | |
| | C1211 | QTE1H06-475Z | E CAPACITOR | | |
| | C1212 | QTE1H06-475Z | E CAPACITOR | | |
| | C1213 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1214 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1215 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C1216 | QTE1H06-475Z | E CAPACITOR | | |
| | C1301 | QFLC1HJ-562Z | M CAPACITOR | 5600PF 5% 50V | |
| | C1302 | QFLC1HJ-562Z | M CAPACITOR | 5600PF 5% 50V | |
| | C1351 | QETN1AM-107Z | E CAPACITOR | 100MF 20% 10V | |
| | C1352 | QETN1HM-106Z | E CAPACITOR | 10MF 20% 50V | |
| | D 801 | 1SS133-T2 | SI DIODE | | |
| | D 802 | MTZJ6.2C-T2 | Z DIODE I/M | | |
| | D 803 | MTZJ6.2C-T2 | Z DIODE I/M | | |
| | D 807 | 1SS133-T2 | SI DIODE | | |
| | D 809 | 1SS133-T2 | SI DIODE | | |
| | D 811 | 1SS133-T2 | SI DIODE | | |
| | D 813 | 1SS133-T2 | SI DIODE | | |
| | D 814 | 1SS133-T2 | SI DIODE | | |
| | D 818 | 1SS133-T2 | SI DIODE | | |
| | D 820 | 1SS133-T2 | SI DIODE | | |
| | D1351 | 1SS133-T2 | SI DIODE | | |
| | D1352 | MTZJ6.8A-T2 | ZENER DIODE | | |
| | EP801 | QNZ0136-001Z | EARTH PLATE | | |
| | EP802 | QNZ0136-001Z | EARTH PLATE | | |
| | EP803 | QNZ0136-001Z | EARTH PLATE | | |
| | EP805 | QNZ0136-001Z | EARTH PLATE | | |
| | FW901 | QUM157-08DGZ4 | PARA RIBON WIRE | TO CN911/912 | |
| | HS156 | E70945-H40B | HEAT SINK | FOR IC156 | |
| | IC151 | TC9164AN | IC | INPUT SOURCE | |
| | IC152 | TC9162AN | IC | REC SOURCE | |
| | IC153 | TC9459F | IC | | |
| | IC154 | TC9459F | IC | | |
| | IC155 | TC9459F | IC | | |
| | IC156 | NJM78M05FA | IC | 5V REG | |
| | IC157 | NJM4580L | IC | | |
| | IC158 | NJM4580L | IC | | |
| | IC159 | NJM4580L | IC | | |
| | IC160 | NJM4580L | IC | | |
| | IC231 | BA7625 | IC | | |
| | IC233 | M5278L09-T | IC I/M | | |
| | IC801 | MN101C12GHE | IC | DVD SYSTEM MICO | |
| | IC802 | MN101C15FHF | MPU | RECIEVER MICOM | |
| | IC803 | IC-PST9140-T | IC | | |
| | IC804 | BR93LC46-W | IC | | |
| | J 231 | QNN0063-001 | PIN JACK | | |
| | J 232 | QNN0063-001 | PIN JACK | | |
| | J 801 | QNS0016-001 | 3.5 JACK | COMPULINK | |
| | J 802 | QNS0016-001 | 3.5 JACK | AV COMPULINK | |
| ⚠ | J 901 | QNC0006-001 | AC SOCKET | | |
| | J1101 | QNN0325-001 | PIN JACK | | |
| | J1102 | QNN0325-001 | PIN JACK | | |
| | J1103 | QND0079-001 | DIN CONNECTOR | | |
| | K 801 | QQR0779-001Z | INDUCTOR | | |
| | K 802 | QQR0779-001Z | INDUCTOR | | |
| | K 803 | QQR0779-001Z | INDUCTOR | | |
| | L 251 | QQL071J-5R6Y | INDUCTOR | | |
| | L 252 | QQL071J-120Y | INDUCTOR | | |
| | L 271 | QQL071J-120Y | INDUCTOR | | |
| | L 272 | QQL071J-5R6Y | INDUCTOR | | |
| | L 901 | QQR1145-001 | INDUCTOR | | |
| | L1301 | QQR0590-001 | FILTER | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | L1302 | QQR0590-001 | FILTER | | |
| | Q 231 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 232 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 233 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 234 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 236 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 801 | KRC102M-T | D.TRANSISTOR | | |
| | Q 802 | KRC102M-T | D.TRANSISTOR | | |
| | Q 803 | KRC102M-T | D.TRANSISTOR | | |
| | Q 804 | KRC102M-T | D.TRANSISTOR | | |
| | Q 805 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 806 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 807 | KRA102M-T | D.TRANSISTOR | | |
| | Q 811 | KRC102M-T | D.TRANSISTOR | | |
| | Q 812 | KTA1271/OY/-T | TRANSISTOR | | |
| | Q 813 | DTC144ESA-T | D.TRANSISTOR | | |
| | Q 814 | KTA1271/OY/-T | TRANSISTOR | | |
| | Q 815 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 816 | KRA102M-T | D.TRANSISTOR | | |
| | Q1131 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1132 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1133 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1134 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1135 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1136 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1137 | 2SC2878/AB/-T | TRANSISTOR | | |
| | Q1351 | KTC3203/OY/-T | TRANSISTOR | | |
| | R 231 | QRE141J-750Y | C RESISTOR | 75 5% 1/4W | |
| | R 232 | QRE141J-750Y | C RESISTOR | 75 5% 1/4W | |
| | R 233 | QRE141J-750Y | C RESISTOR | 75 5% 1/4W | |
| | R 234 | QRE141J-750Y | C RESISTOR | 75 5% 1/4W | |
| | R 235 | QRE141J-331Y | C RESISTOR | 330 5% 1/4W | |
| | R 236 | QRE141J-331Y | C RESISTOR | 330 5% 1/4W | |
| | R 237 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 238 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 239 | QRE141J-331Y | C RESISTOR | 330 5% 1/4W | |
| | R 241 | QRE141J-151Y | C RESISTOR | 150 5% 1/4W | |
| | R 242 | QRE141J-151Y | C RESISTOR | 150 5% 1/4W | |
| ⚠ | R 243 | QRZ9006-4R7X | F RESISTOR | 4.7 1/4W | |
| | R 246 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 247 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 248 | QRE141J-750Y | C RESISTOR | 75 5% 1/4W | |
| | R 249 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 250 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 251 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 252 | QRE141J-680Y | C RESISTOR | 68 5% 1/4W | |
| | R 253 | QRE141J-391Y | C RESISTOR | 390 5% 1/4W | |
| | R 254 | QRE141J-680Y | C RESISTOR | 68 5% 1/4W | |
| | R 255 | QRE141J-391Y | C RESISTOR | 390 5% 1/4W | |
| | R 261 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 262 | QRE141J-750Y | C RESISTOR | 75 5% 1/4W | |
| | R 271 | QRE141J-122Y | C RESISTOR | 1.2K 5% 1/4W | |
| | R 272 | QRE141J-751Y | C RESISTOR | 750 5% 1/4W | |
| | R 273 | QRE141J-751Y | C RESISTOR | 750 5% 1/4W | |
| | R 274 | QRE141J-122Y | C RESISTOR | 1.2K 5% 1/4W | |
| | R 275 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 276 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 801 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 802 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 803 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 805 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 806 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 811 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |

■ **Electrical parts list (Main board)** **Block No. 01**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 812 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 813 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 817 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 818 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| ⚠ | R 821 | QRZ9006-4R7X | F RESISTOR | 4.7 1/4W | |
| | R 822 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 823 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 824 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 825 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 829 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 831 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 832 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 833 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 834 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 835 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 836 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 841 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 843 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 844 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 845 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 846 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 847 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 848 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 849 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 850 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 851 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 852 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 853 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 854 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 855 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 856 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 857 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 858 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 859 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 860 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 861 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 862 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 863 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 864 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 865 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 866 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 867 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 868 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 869 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 871 | QRE141J-681Y | C RESISTOR | 680 5% 1/4W | |
| | R 872 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 873 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 874 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 877 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 881 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 882 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 883 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 888 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 889 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 890 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 891 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 892 | QRE141J-105Y | C RESISTOR | 1.0M 5% 1/4W | |
| | R 893 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 894 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R1101 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1102 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1103 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1104 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R1105 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1106 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1107 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1108 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1109 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1110 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1111 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1112 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1115 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1116 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1117 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1118 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1125 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R1126 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R1127 | QRE141J-122Y | C RESISTOR | 1.2K 5% 1/4W | |
| | R1128 | QRE141J-122Y | C RESISTOR | 1.2K 5% 1/4W | |
| | R1129 | QRE141J-272Y | C RESISTOR | 2.7K 5% 1/4W | |
| | R1130 | QRE141J-272Y | C RESISTOR | 2.7K 5% 1/4W | |
| | R1131 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1132 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1133 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R1134 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R1135 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1136 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1137 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1138 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1139 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1140 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1141 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R1142 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R1143 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1144 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1145 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1146 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1147 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1148 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1149 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1150 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R1151 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R1152 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1153 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R1154 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R1155 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1156 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1157 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1158 | QRE141J-273Y | C RESISTOR | 27K 5% 1/4W | |
| | R1161 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1162 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1163 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1164 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1165 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1166 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R1167 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1168 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1169 | QRE141J-123Y | C RESISTOR | 12K 5% 1/4W | |
| | R1170 | QRE141J-123Y | C RESISTOR | 12K 5% 1/4W | |
| | R1171 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1172 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1173 | QRE141J-123Y | C RESISTOR | 12K 5% 1/4W | |
| | R1174 | QRE141J-123Y | C RESISTOR | 12K 5% 1/4W | |
| | R1175 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R1176 | QRE141J-123Y | C RESISTOR | 12K 5% 1/4W | |
| ⚠ | R1181 | QRZ9005-470X | F.RES I/M | 47 1/4W | |

■ **Electrical parts list (Main board)** **Block No. 01**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| ⚠ | R1182 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1183 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1184 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1185 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1186 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1187 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1188 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1189 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1190 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1191 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1192 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1193 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| ⚠ | R1194 | QRZ9005-470X | F.RES I/M | 47 1/4W | |
| | R1196 | QRE141J-474Y | C RESISTOR | 470K 5% 1/4W | |
| | R1197 | QRE141J-474Y | C RESISTOR | 470K 5% 1/4W | |
| | R1301 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R1302 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| ⚠ | R1351 | QRZ9006-4R7X | F RESISTOR | 4.7 1/4W | |
| | R1352 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | SP153 | VYH7653-002 | IC HOLDER | FOR IC1153 | |
| | SP154 | VYH7653-002 | IC HOLDER | FOR IC1154 | |
| | SP155 | VYH7653-002 | IC HOLDER | FOR IC1154 | |
| | SP801 | VYH7237-005 | IC HOLDER | FOR IC801 | |
| | SP802 | VYH7237-003SC | IC HOLDER | FOR IC802 | |
| | WA231 | WJP0017-001A | E-SH C WIRE C-B | JSC:WJP0017-001 | |
| | X 801 | QAX0356-001Z | RESONATOR | | |
| | X 802 | QAX0246-001Z | RESONATOR | | |

■ **Electrical parts list (Front & Power board)** **Block No. 02**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 201 | NCS21HJ-470X | C CAPACITOR | | |
| | C 202 | NCS21HJ-470X | C CAPACITOR | | |
| | C 203 | NCS21HJ-470X | C CAPACITOR | | |
| | C 204 | NCS21HJ-470X | C CAPACITOR | | |
| | C 205 | NCB21EK-473X | C CAPACITOR | | |
| | C 206 | QERF1EM-475Z | E CAPACITOR | 4.7MF 20% 25V | |
| | C 207 | NCB21EK-473X | C CAPACITOR | | |
| | C 208 | QERF1EM-475Z | E CAPACITOR | 4.7MF 20% 25V | |
| | C 209 | NCB21EK-473X | C CAPACITOR | | |
| | C 210 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 211 | NCB21EK-473X | C CAPACITOR | | |
| | C 212 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 213 | NCB21HK-103X | C CAPACITOR | | |
| | C 214 | NCB21EK-473X | C CAPACITOR | | |
| | C 215 | QERF1EM-475Z | E CAPACITOR | 4.7MF 20% 25V | |
| | C 216 | QER41AM-107 | E CAPACITOR | 100MF 20% 10V | |
| | C 217 | NCB21HK-103X | C CAPACITOR | | |
| | C 218 | QERF1EM-475Z | E CAPACITOR | 4.7MF 20% 25V | |
| | C 226 | NCB21EK-473X | C CAPACITOR | | |
| | C 228 | NCB21EK-473X | C CAPACITOR | | |
| | C 701 | NCB21HK-103X | C CAPACITOR | | |
| | C 702 | NCB21HK-471X | C CAPACITOR | | |
| | C 703 | NCB21HK-471X | C CAPACITOR | | |
| | C 704 | NCB21HK-471X | C CAPACITOR | | |
| | C 705 | NCB21HK-471X | C CAPACITOR | | |
| | C 706 | QERF0JM-107Z | E CAPACITOR | 100MF 20% 6.3V | |
| | C 707 | NCB21HK-102X | C CAPACITOR | | |
| | C 708 | NCB21HK-103X | C CAPACITOR | | |
| | C 709 | QERF1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 710 | QERF1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 711 | QERF0JM-226Z | E CAPACITOR | 22MF 20% 6.3V | |
| | C 731 | NCB21HK-103X | C CAPACITOR | | |
| | C 732 | NCB21HK-103X | C CAPACITOR | | |
| | C 733 | QERF0JM-226Z | E CAPACITOR | 22MF 20% 6.3V | |
| | C 911 | QETN1VM-227Z | E CAPACITOR I/M | 220MF 20% 35V | |
| | C 912 | QETN1HM-227Z | E CAPACITOR | 220MF 20% 50V | |
| | C 913 | QETN1HM-476Z | E CAPACITOR | 47MF 20% 50V | |
| | C 914 | QETN1HM-476Z | E CAPACITOR | 47MF 20% 50V | |
| | C 915 | QETN1AM-107Z | E CAPACITOR | 100MF 20% 10V | |
| | C 921 | QETM1EM-228 | E CAPACITOR | 2200MF 20% 25V | |
| | C 922 | QETN1EM-108Z | E CAPACITOR | 1000MF 20% 25V | |
| | C 923 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C 924 | QETN1HM-105Z | E CAPACITOR | 1.0MF 20% 50V | |
| | C 925 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C 926 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C 927 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 928 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 936 | QETN1HM-225Z | E CAPACITOR | 2.2MF 20% 50V | |
| | C 941 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 942 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | C 943 | QETM1EM-478 | E CAPACITOR | 4700MF 20% 25V | |
| | C 944 | QETN1HM-106Z | E CAPACITOR | 10MF 20% 50V | |
| | C 945 | NCB11CK-105X | C CAPACITOR | | |
| | C 946 | NCB11CK-105X | C CAPACITOR | | |
| | C 947 | NCB21HK-221X | C CAPACITOR | | |
| | C 948 | NCB21HK-221X | C CAPACITOR | | |
| | C 961 | NCB21HK-221X | C CAPACITOR | | |
| | C 962 | NCB21HK-221X | C CAPACITOR | | |
| | C 963 | NCB21HK-153X | C CAPACITOR | | |
| | C 964 | NCS21HJ-152X | C CAPACITOR | | |
| | C 965 | QEKC1EM-476Z | E.CAPACITOR | 47MF 20% 25V | |
| | C 971 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |
| | C 972 | QETN0JM-477Z | E CAPACITOR | 470MF 20% 6.3V | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 974 | QETN0JM-108Z | E CAPACITOR | 1000MF 20% 6.3V | |
| | C 975 | QETN0JM-108Z | E CAPACITOR | 1000MF 20% 6.3V | |
| | C 977 | NCB21HK-102X | C CAPACITOR | | |
| | C 978 | QETN0JM-108Z | E CAPACITOR | 1000MF 20% 6.3V | |
| | C 979 | QETN0JM-108Z | E CAPACITOR | 1000MF 20% 6.3V | |
| | C 980 | QETN0JM-108Z | E CAPACITOR | 1000MF 20% 6.3V | |
| | C 981 | NCB21HK-102X | C CAPACITOR | | |
| | C 982 | QETN1AM-477Z | E CAPACITOR | 470MF 20% 10V | |
| | C 983 | QETN1AM-477Z | E CAPACITOR | 470MF 20% 10V | |
| | C 984 | NCB21HK-102X | C CAPACITOR | | |
| | C 986 | NCB21HK-331X | C.CAPACITOR | | |
| | C 987 | NCB21HK-331X | C.CAPACITOR | | |
| | C 988 | NCB21HK-331X | C.CAPACITOR | | |
| | C 989 | NCB21HK-331X | C.CAPACITOR | | |
| | C 999 | QCF11HZ-103 | C CAPACITOR | .010MF +80:-20% | |
| | CN201 | QGF1205F1-10 | CONNECTOR | | |
| | CN701 | QGA1002F1-15X | CONNECTOR | 1MM PITCH | |
| | CN702 | QGA2001C1-04 | 4P PLUG ASSY | | |
| | CN705 | QGA2001C1-05 | 5P PLUG ASSY | | |
| | CN706 | QGA2001C1-03 | 3P PLUG ASSY | | |
| ⚠ | CN911 | QGD2501C1-03Z | SOCKET | | |
| ⚠ | CN912 | QGD2501C1-04Z | SOCKET | | |
| | CN913 | QGB2011L1-08 | B TO B CONNECTO | | |
| | CN914 | QGB2011L1-08 | B TO B CONNECTO | | |
| | D 701 | 1SS355-X | DIODE | | |
| | D 702 | 1SS355-X | DIODE | | |
| | D 703 | 1SS355-X | DIODE | | |
| | D 706 | 1SS355-X | DIODE | BAND 0 | |
| | D 713 | 1SS355-X | DIODE | | |
| | D 715 | 1SS355-X | DIODE | | |
| | D 721 | SLR-342VC-T | LED | LFE | |
| | D 722 | SLR-342VC-T | LED | L | |
| | D 723 | SLR-342VC-T | LED | C | |
| | D 724 | SLR-342VC-T | LED | R | |
| | D 725 | SLR-342VC-T | LED | LS | |
| | D 726 | SLR-342VC-T | LED | S | |
| | D 727 | SLR-342VC-T | LED | RS | |
| | D 731 | SELU1E56BM | LED | EJECT LED(BLUE) | |
| | D 732 | SELU1E56BM | LED | POWER LED(BLUE) | |
| | D 733 | SLR-342VC-T | LED | STANDBY LED | |
| | D 734 | 1SS355-X | DIODE | | |
| ⚠ | D 911 | 1SR35-400A-T5 | DIODE I/M | | |
| ⚠ | D 912 | 1SR35-400A-T5 | DIODE I/M | | |
| ⚠ | D 913 | 1SR35-400A-T5 | DIODE I/M | | |
| | D 915 | 1SS355-X | DIODE | | |
| | D 916 | MA3360/L/-X | Z.DIODE C.M | | |
| | D 918 | 1SS355-X | DIODE | | |
| | D 919 | 1SS355-X | DIODE | | |
| ⚠ | D 921 | 1SR35-400A-T5 | DIODE I/M | | |
| ⚠ | D 922 | 1SR35-400A-T5 | DIODE I/M | | |
| ⚠ | D 923 | 1SR35-400A-T5 | DIODE I/M | | |
| ⚠ | D 924 | 1SR35-400A-T5 | DIODE I/M | | |
| | D 925 | MA3100/M/-X | ZENER DIODE | | |
| | D 926 | MA3030/L/-X | Z.DIODE I.M | | |
| | D 927 | 1SS355-X | DIODE | | |
| ⚠ | D 928 | 1SS388-X | SB DIODE | | |
| | D 936 | 1SS355-X | DIODE | | |
| | D 937 | 1SS355-X | DIODE | | |
| | D 939 | MA3051/M/-X | ZENER DIODE | | |
| ⚠ | D 941 | D3SBA20-S3 | DIODE | | |
| | D 942 | CRS01-W | SB DIODE | | |
| | D 943 | SFPJ-73-W | SB.DIODE C.M | | |
| | D 944 | SFPJ-73-W | SB.DIODE C.M | | |

■ **Electrical parts list (Front & Power board)** **Block No. 02**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | D 945 | CRS01-W | SB DIODE | | |
| | D 947 | 1SS355-X | DIODE | | |
| | D 948 | 1SS355-X | DIODE | | |
| | D 949 | 1SS355-X | DIODE | | |
| | D 950 | 1SS355-X | DIODE | | |
| | D 951 | 1SS355-X | DIODE | | |
| | D 952 | 1SS355-X | DIODE | | |
| | D 953 | 1SS355-X | DIODE | | |
| | D 954 | 1SS355-X | DIODE | | |
| | D 962 | 1SS355-X | DIODE | | |
| | DI701 | QLF0073-002 | FL TUBE | | |
| | EP901 | E409182-001SM | GRAND TERMINAL | | |
| | HS921 | E70945-H40B | HEAT SINK | FOR Q921 | |
| | HS923 | LE40505-001A | HEAT SINK | FOR Q923 | |
| | IC201 | BA7625 | IC | | |
| | IC202 | BA7625 | IC | | |
| | IC701 | MN173222DM | IC | DISPLAY MICOM | |
| | IC711 | GP1U261X | IR DETECT UNIT | | |
| ⚠ | IC941 | MB3785APFV | IC | | |
| | J 201 | QND0002-001 | S-CONNECTOR | | |
| | J 202 | QND0002-002 | S-CONNECTOR | | |
| | K 941 | QQR0601-001Z | FERRITE BEADS | | |
| | K 942 | QQR0601-001Z | FERRITE BEADS | | |
| | K 943 | QQR0601-001Z | FERRITE BEADS | | |
| | K 944 | QQR0601-001Z | FERRITE BEADS | | |
| | K 945 | QQR0601-001Z | FERRITE BEADS | | |
| | K 946 | QQR0601-001Z | FERRITE BEADS | | |
| | K 947 | QQR0601-001Z | FERRITE BEADS | | |
| | K 948 | QQR0601-001Z | FERRITE BEADS | | |
| | K 949 | QQR0601-001Z | FERRITE BEADS | | |
| | K 950 | QQR0601-001Z | FERRITE BEADS | | |
| | K 951 | QQR0601-001Z | FERRITE BEADS | | |
| | K 953 | QQR0601-001Z | FERRITE BEADS | | |
| | L 941 | QQL31AK-470Z | INDUCTOR | | |
| | L 945 | QQL44BK-681Z | INDUCTOR | | |
| | L 946 | QQL49AK-470Z | INDUCTOR | | |
| | L 947 | QQL58AK-680 | INDUCTOR | | |
| | L 948 | QQL49AK-470Z | INDUCTOR | | |
| | L 950 | QQL44BK-121Z | INDUCTOR I/M | | |
| | L 951 | QQL49AK-470Z | INDUCTOR | | |
| | L 952 | QQL49AK-470Z | INDUCTOR | | |
| | L 953 | QQL44BK-181Z | INDUCTOR I/M | | |
| | L 954 | QQL49AK-470Z | INDUCTOR | | |
| | Q 201 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 202 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 203 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 204 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 703 | DTC124EKA-X | TRANSISTOR | | |
| | Q 704 | DTC124EKA-X | TRANSISTOR | | |
| | Q 705 | DTC114TKA-X | TRANSISTOR | | |
| | Q 706 | DTA114EKA-X | DIGITAL.TRANSIS | | |
| | Q 707 | DTA114EKA-X | DIGITAL.TRANSIS | | |
| | Q 708 | DTA114EKA-X | DIGITAL.TRANSIS | | |
| | Q 709 | DTA114EKA-X | DIGITAL.TRANSIS | | |
| | Q 711 | DTC114EKA-X | TRANSISTOR | | |
| | Q 712 | DTC114EKA-X | TRANSISTOR | | |
| | Q 713 | DTC114EKA-X | TRANSISTOR | | |
| | Q 714 | DTC114EKA-X | TRANSISTOR | | |
| | Q 715 | DTC114EKA-X | TRANSISTOR | | |
| | Q 716 | DTC114EKA-X | TRANSISTOR | | |
| | Q 717 | DTC114EKA-X | TRANSISTOR | | |
| | Q 718 | DTC114EKA-X | TRANSISTOR | | |
| | Q 911 | KRC102M-T | D.TRANSISTOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | Q 912 | 2SB647/CD/-T | TRANSISTOR | | |
| | Q 913 | 2SD2144S/VW/-T | TRANSISTOR | | |
| | Q 914 | 2SD2144S/VW/-T | TRANSISTOR | | |
| | Q 915 | DTA114EKA-X | DIGITAL.TRANSIS | | |
| | Q 921 | 2SB1566/EF/ | TRANSISTOR | | |
| | Q 922 | 2SC2412K/RS/-X | CHIP TRANSISTOR | | |
| | Q 923 | 2SB1566/EF/ | TRANSISTOR | | |
| | Q 924 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 932 | 2SC2412K/RS/-X | CHIP TRANSISTOR | | |
| | Q 942 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 943 | 2SB1197K/QR/-X | TRANSISTOR | | |
| | Q 944 | 2SC2412K/RS/-X | CHIP TRANSISTOR | | |
| | Q 945 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 946 | 2SB1188/QR/-W | CHIP TRANSISTOR | | |
| | Q 947 | 2SC2412K/RS/-X | CHIP TRANSISTOR | | |
| | Q 948 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 949 | 2SB1188/QR/-W | CHIP TRANSISTOR | | |
| | Q 950 | 2SC2412K/RS/-X | CHIP TRANSISTOR | | |
| | Q 951 | 2SA1037AK/RS/-X | TRANSISTOR | | |
| | Q 952 | 2SB1188/QR/-W | CHIP TRANSISTOR | | |
| | Q 954 | SI2305DS-X | TRANSISTOR | | |
| | Q 955 | DTC124EKA-X | TRANSISTOR | | |
| | Q 956 | DTC124EKA-X | TRANSISTOR | | |
| | R 21 | NRSA02J-271X | MG RESISTOR | | |
| | R 22 | NRSA02J-271X | MG RESISTOR | | |
| | R 23 | NRSA02J-221X | MG RESISTOR | | |
| | R 24 | NRSA02J-221X | MG RESISTOR | | |
| | R 25 | NRSA02J-750X | MG RESISTOR | | |
| | R 26 | NRSA02J-750X | MG RESISTOR | | |
| | R 201 | NRSA02J-750X | MG RESISTOR | | |
| | R 202 | NRSA02J-750X | MG RESISTOR | | |
| | R 203 | NRSA02J-750X | MG RESISTOR | | |
| | R 204 | NRSA02J-750X | MG RESISTOR | | |
| | R 206 | NRSA02J-473X | MG RESISTOR | | |
| | R 207 | NRSA02J-750X | MG RESISTOR | | |
| | R 208 | NRSA02J-750X | MG RESISTOR | | |
| | R 210 | NRSA02J-473X | MG RESISTOR | | |
| | R 211 | NRSA02J-750X | MG RESISTOR | | |
| | R 212 | NRSA02J-750X | MG RESISTOR | | |
| | R 216 | NRSA02J-331X | MG RESISTOR | | |
| | R 217 | NRSA02J-331X | MG RESISTOR | | |
| | R 218 | NRSA02J-271X | MG RESISTOR | | |
| | R 219 | NRSA02J-271X | MG RESISTOR | | |
| | R 220 | QRZ9006-4R7X | F RESISTOR | 4.7 1/4W | |
| | R 701 | NRSA02J-102X | MG RESISTOR | | |
| | R 702 | NRSA02J-102X | MG RESISTOR | | |
| | R 703 | NRSA02J-102X | MG RESISTOR | | |
| | R 704 | NRSA02J-102X | MG RESISTOR | | |
| | R 705 | NRSA02J-102X | MG RESISTOR | | |
| | R 707 | NRSA02J-103X | MG RESISTOR | | |
| | R 708 | NRSA02J-103X | MG RESISTOR | | |
| | R 709 | NRSA02J-103X | MG RESISTOR | | |
| | R 710 | NRSA02J-103X | MG RESISTOR | | |
| | R 711 | NRSA02J-223X | MG RESISTOR | | |
| | R 712 | NRSA02J-102X | MG RESISTOR | | |
| | R 713 | NRSA02J-104X | MG RESISTOR | | |
| | R 714 | NRSA02J-104X | MG RESISTOR | | |
| | R 715 | NRSA02J-104X | MG RESISTOR | | |
| | R 716 | NRSA02J-104X | MG RESISTOR | | |
| | R 724 | NRSA02J-221X | MG RESISTOR | | |
| | R 725 | NRSA02J-103X | MG RESISTOR | | |
| | R 726 | NRSA02J-223X | MG RESISTOR | | |
| | R 727 | NRSA02J-223X | MG RESISTOR | | |

■ **Electrical parts list (Front & Power board)** **Block No. 02**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 728 | NRSA02J-221X | MG RESISTOR | | |
| | R 729 | NRSA02J-471X | MG RESISTOR | | |
| | R 731 | NRSA02J-301X | MG RESISTOR | | |
| | R 732 | NRSA02J-472X | MG RESISTOR | | |
| | R 741 | NRSA02J-221X | MG RESISTOR | | |
| | R 742 | NRSA02J-221X | MG RESISTOR | | |
| | R 743 | NRSA02J-221X | MG RESISTOR | | |
| | R 744 | NRSA02J-221X | MG RESISTOR | | |
| | R 745 | NRSA02J-221X | MG RESISTOR | | |
| | R 746 | NRSA02J-221X | MG RESISTOR | | |
| | R 747 | NRSA02J-221X | MG RESISTOR | | |
| | R 751 | NRSA02J-221X | MG RESISTOR | | |
| | R 752 | NRSA02J-472X | MG RESISTOR | | |
| | R 753 | NRSA02J-301X | MG RESISTOR | | |
| | R 756 | NRSA02J-103X | MG RESISTOR | | |
| ⚠ | R 911 | QRZ9005-680X | F.RESISTOR | 68 1/4W | |
| | R 912 | NRSA02J-222X | MG RESISTOR | | |
| | R 913 | NRSA02J-333X | MG RESISTOR | | |
| | R 914 | NRSA02J-102X | MG RESISTOR | | |
| | R 915 | NRSA02J-102X | MG RESISTOR | | |
| | R 916 | NRSA02J-103X | MG RESISTOR | | |
| | R 917 | NRSA02J-103X | MG RESISTOR | | |
| | R 918 | NRSA02J-103X | MG RESISTOR | | |
| | R 919 | NRSA02J-333X | MG RESISTOR | | |
| ⚠ | R 921 | QRT012J-2R2 | UNF.MF.RES. | 2.2 5% 1/1W | |
| ⚠ | R 922 | QRZ9006-4R7X | F RESISTOR | 4.7 1/4W | |
| | R 923 | NRSA02J-331X | MG RESISTOR | | |
| | R 924 | NRSA02J-221X | MG RESISTOR | | |
| | R 925 | NRSA02J-222X | MG RESISTOR | | |
| | R 926 | NRSA02J-562X | MG RESISTOR | | |
| | R 927 | NRSA02J-562X | MG RESISTOR | | |
| | R 928 | NRSA02J-471X | MG RESISTOR | | |
| | R 929 | NRSA02J-561X | MG RESISTOR | | |
| | R 935 | NRSA02J-472X | MG RESISTOR | | |
| | R 936 | NRSA02J-472X | MG RESISTOR | | |
| | R 937 | NRSA02J-472X | MG RESISTOR | | |
| | R 938 | NRSA02J-102X | MG RESISTOR | | |
| | R 941 | NRSA02J-822X | MG RESISTOR | | |
| | R 942 | NRSA02J-272X | MG RESISTOR | | |
| | R 943 | NRSA02J-472X | MG RESISTOR | | |
| | R 944 | NRSA02J-472X | MG RESISTOR | | |
| | R 945 | NRSA02J-154X | MG RESISTOR | | |
| | R 946 | NRSA02J-333X | MG RESISTOR | | |
| | R 947 | NRSA02J-273X | MG RESISTOR | | |
| | R 948 | NRSA02J-472X | MG RESISTOR | | |
| | R 949 | NRSA02J-472X | MG RESISTOR | | |
| | R 950 | NRSA02J-154X | MG RESISTOR | | |
| | R 951 | NRSA02J-333X | MG RESISTOR | | |
| | R 952 | NRSA02J-273X | MG RESISTOR | | |
| | R 953 | NRSA02J-272X | MG RESISTOR | | |
| | R 954 | NRSA02J-103X | MG RESISTOR | | |
| | R 955 | NRSA02J-102X | MG RESISTOR | | |
| | R 956 | NRSA02J-102X | MG RESISTOR | | |
| | R 957 | NRSA02J-102X | MG RESISTOR | | |
| | R 958 | NRSA02J-102X | MG RESISTOR | | |
| | R 961 | NRSA02J-103X | MG RESISTOR | | |
| | R 962 | NRSA02J-154X | MG RESISTOR | | |
| | R 963 | NRSA02J-122X | MG RESISTOR | | |
| | R 964 | NRSA02J-752X | MG RESISTOR | | |
| | R 965 | NRSA02J-472X | MG RESISTOR | | |
| | R 966 | NRSA02J-472X | MG RESISTOR | | |
| | R 967 | NRSA02J-103X | MG RESISTOR | | |
| | R 968 | NRSA02J-154X | MG RESISTOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 969 | NRSA02J-272X | MG RESISTOR | | |
| | R 970 | NRSA02J-472X | MG RESISTOR | | |
| | R 971 | NRSA02J-472X | MG RESISTOR | | |
| | R 972 | NRSA02J-472X | MG RESISTOR | | |
| | R 973 | NRSA02J-103X | MG RESISTOR | | |
| | R 974 | NRSA02J-682X | MG RESISTOR | | |
| | R 975 | NRSA02J-224X | MG RESISTOR | | |
| | R 980 | NRSA02J-103X | MG RESISTOR | | |
| | R 982 | NRSA02J-681X | MG RESISTOR | | |
| | R 983 | NRSA02J-470X | MG RESISTOR | | |
| | R 984 | NRSA02J-472X | MG RESISTOR | | |
| | R 985 | NRSA02J-102X | MG RESISTOR | | |
| | R 986 | NRSA02J-681X | MG RESISTOR | | |
| | R 987 | NRSA02J-120X | MG RESISTOR | | |
| | R 988 | NRSA02J-472X | MG RESISTOR | | |
| | R 989 | NRSA02J-222X | MG RESISTOR | | |
| | R 990 | NRSA02J-681X | MG RESISTOR | | |
| | R 991 | NRSA02J-180X | MG RESISTOR | | |
| | R 992 | NRSA02J-472X | MG RESISTOR | | |
| | R 993 | NRSA02J-222X | MG RESISTOR | | |
| | R 994 | NRSA02J-681X | MG RESISTOR | | |
| | R 995 | NRSA02J-150X | MG RESISTOR | | |
| | R 996 | NRSA02J-472X | MG RESISTOR | | |
| | R 998 | NRSA02J-103X | MG RESISTOR | | |
| | R9001 | NRSA02J-331X | MG RESISTOR | | |
| | R9007 | NRSA02J-121X | MG RESISTOR | | |
| | R9010 | NRSA02J-101X | MG RESISTOR | | |
| | R9013 | NRSA02J-151X | MG RESISTOR | | |
| | S 701 | QSW0683-001Z | PUSH SW I.M | | |
| | S 702 | QSW0683-001Z | PUSH SW I.M | | |
| | S 703 | QSW0683-001Z | PUSH SW I.M | | |
| | S 704 | QSW0683-001Z | PUSH SW I.M | | |
| | S 705 | QSW0683-001Z | PUSH SW I.M | | |
| | S 706 | QSW0683-001Z | PUSH SW I.M | | |
| | S 707 | QSW0683-001Z | PUSH SW I.M | | |
| | S 708 | QSW0683-001Z | PUSH SW I.M | | |
| | S 709 | QSW0683-001Z | PUSH SW I.M | | |
| | S 710 | QSW0683-001Z | PUSH SW I.M | | |
| | S 711 | QSW0683-001Z | PUSH SW I.M | EJECT | |
| | S 712 | QSW0683-001Z | PUSH SW I.M | POWER | |
| | SH901 | LV32044-001A | SHIELD CASE | | |
| | WA701 | QJC002-090804 | E-S ID WIRE | JSC:QJC002-0908 | |
| | WA702 | QJK021-040804 | C-B WIRE | JSC:QJK021-0408 | |
| | WA703 | QJC002-050800 | E-S ID WIRE | JSC:QJC002-0508 | |
| | WA704 | QJC002-090804 | E-S ID WIRE | JSC:QJC002-0908 | |
| | WA705 | QJK021-050800 | SIN CR C-B WIRE | JSC:QJK021-0508 | |
| | WA706 | QJB001-030803 | E-S ID WIRE | JSC:QJB001-0308 | |
| | WA914 | WJK0099-001A | E-SI C WIER C-B | JSC:WJK0099-001 | |
| | X 701 | NAX0192-001X | C.OSCILLATOR | 6MHZ | |
| | Z 901 | QNG0020-001Z | FUSE CLIP | FOR F901 | |
| | Z 902 | QNG0020-001Z | FUSE CLIP | FOR F901 | |
| | Z 903 | QNG0020-001Z | FUSE CLIP | FOR F902 | |
| | Z 904 | QNG0020-001Z | FUSE CLIP | FOR F902 | |
| | Z 905 | QNG0020-001Z | FUSE CLIP | FOR F903 | |
| | Z 906 | QNG0020-001Z | FUSE CLIP | FOR F903 | |

■ **Electrical parts list (DSP board)** **Block No. 03**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 601 | NCB31HK-102X | C CAPACITOR | | |
| | C 602 | NCB31HK-102X | C CAPACITOR | | |
| | C 603 | NEA70JM-476X | E.CAPACITOR | | |
| | C 604 | NEA70JM-476X | E.CAPACITOR | | |
| | C 605 | NCB31CK-104X | C CAPACITOR | | |
| | C 606 | NCB31CK-104X | C CAPACITOR | | |
| | C 607 | NEA71CM-476X | E CAPACITOR | | |
| | C 608 | NCF31CZ-104X | C CAPACITOR | | |
| | C 609 | NCB31CK-104X | C CAPACITOR | | |
| | C 610 | NEA70JM-476X | E.CAPACITOR | | |
| | C 611 | NEA70JM-476X | E.CAPACITOR | | |
| | C 612 | NCB31CK-103X | C CAPACITOR | | |
| | C 621 | NEA71HM-105X | E.CAPACITOR | | |
| | C 622 | NCB31HK-101X | C CAPACITOR | | |
| | C 623 | NCB30JK-105X | C CAPACITOR | | |
| | C 624 | NCB31CK-104X | C CAPACITOR | | |
| | C 625 | NCB31CK-104X | C CAPACITOR | | |
| | C 628 | NCB31CK-103X | C CAPACITOR | | |
| | C 631 | NEA70JM-107X | E.CAPACITOR | | |
| | C 632 | NCB31CK-103X | C CAPACITOR | | |
| | C 633 | NCB31CK-104X | C CAPACITOR | | |
| | C 634 | NCB31CK-104X | C CAPACITOR | | |
| | C 635 | NCB31CK-104X | C CAPACITOR | | |
| | C 636 | NCB31CK-104X | C CAPACITOR | | |
| | C 637 | NCB31CK-104X | C CAPACITOR | | |
| | C 638 | NEA70JM-476X | E.CAPACITOR | | |
| | C 639 | NCB31CK-103X | C CAPACITOR | | |
| | C 641 | NEA70JM-107X | E.CAPACITOR | | |
| | C 642 | NCB31CK-103X | C CAPACITOR | | |
| | C 643 | NCB31AK-474X | C CAPACITOR | | |
| | C 644 | NCB31CK-103X | C CAPACITOR | | |
| | C 645 | NCS31HJ-101X | C.CAPACITOR | | |
| | C 646 | NCB31CK-103X | C CAPACITOR | | |
| | C 647 | NCS31HJ-220X | C CAPACITOR | | |
| | C 648 | NCS31HJ-180X | C CAPACITOR | | |
| | C 649 | NCS31HJ-121X | C CAPACITOR | | |
| | C 653 | NCB31CK-104X | C CAPACITOR | | |
| | C 654 | NEA70JM-107X | E.CAPACITOR | | |
| | C 671 | NCB31CK-103X | C CAPACITOR | | |
| | C 672 | NEA70JM-107X | E.CAPACITOR | | |
| | C 673 | NCB31CK-103X | C CAPACITOR | | |
| | C 675 | NRSA63J-103X | MG RESISTOR | | |
| | C 677 | NCB30JK-105X | C CAPACITOR | | |
| | C 679 | NCB31HK-101X | C CAPACITOR | | |
| | C 680 | NCB30JK-105X | C CAPACITOR | | |
| | C 681 | NCB31CK-103X | C CAPACITOR | | |
| | C 682 | NCB31CK-103X | C CAPACITOR | | |
| | C 683 | NCB31CK-103X | C CAPACITOR | | |
| | C 684 | NEA70JM-107X | E.CAPACITOR | | |
| | C 685 | NEA71CM-476X | E CAPACITOR | | |
| | C 686 | NEA71CM-476X | E CAPACITOR | | |
| | C 687 | NCB31CK-103X | C CAPACITOR | | |
| | C 688 | NEA70JM-107X | E.CAPACITOR | | |
| | C 689 | NCB31CK-103X | C CAPACITOR | | |
| | C 690 | NEA70JM-107X | E.CAPACITOR | | |
| | C 691 | NEA71CM-226X | E.CAPACITOR | | |
| | C 692 | NEA71CM-226X | E.CAPACITOR | | |
| | C 693 | NCB31CK-103X | C CAPACITOR | | |
| | C 694 | NCB31CK-103X | C CAPACITOR | | |
| | C 695 | NEA71EM-475X | E.CAPACITOR. | | |
| | C 696 | NEA71EM-475X | E.CAPACITOR. | | |
| | C 697 | NEA71EM-475X | E.CAPACITOR. | | |
| | C 698 | NEA71EM-475X | E.CAPACITOR. | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | CN681 | QGF1016F2-19W | CONNECTOR | | |
| | CN687 | QGF1016F2-13W | CONNECTOR C.M | | |
| | C2500 | NEA71CM-226X | E.CAPACITOR | | |
| | C2501 | NCB31AK-474X | C CAPACITOR | | |
| | C2503 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2504 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2505 | NCS31HJ-560X | C CAPACITOR | | |
| | C2506 | NCS31HJ-560X | C CAPACITOR | | |
| | C2507 | NCS31HJ-560X | C CAPACITOR | | |
| | C2508 | NCS31HJ-560X | C CAPACITOR | | |
| | C2509 | NCF31CZ-104X | C CAPACITOR | | |
| | C2510 | NCF31CZ-104X | C CAPACITOR | | |
| | C2511 | NCB31AK-474X | C CAPACITOR | | |
| | C2512 | NCB31AK-474X | C CAPACITOR | | |
| | C2513 | NCB31CK-183X | C CAPACITOR | | |
| | C2514 | NCB31CK-183X | C CAPACITOR | | |
| | C2515 | NCB31HK-182X | C CAPACITOR | | |
| | C2516 | NCB31HK-182X | C CAPACITOR | | |
| | C2517 | NCB31HK-562X | C CAPACITOR | | |
| | C2518 | NCB31HK-562X | C CAPACITOR | | |
| | C2519 | NCF31CZ-104X | C CAPACITOR | | |
| | C2520 | NCF31CZ-104X | C CAPACITOR | | |
| | C2521 | NFV41CJ-103X | M CAPACITOR | | |
| | C2522 | NFV41CJ-103X | M CAPACITOR | | |
| | C2523 | NFV41HJ-272X | M CAPACITOR | | |
| | C2524 | NFV41HJ-272X | M CAPACITOR | | |
| | C2525 | NFV41CJ-392X | M CAPACITOR | | |
| | C2526 | NFV41CJ-392X | M CAPACITOR | | |
| | C2527 | NEA71CM-226X | E.CAPACITOR | | |
| | C2528 | NEA71CM-226X | E.CAPACITOR | | |
| | C2529 | NCF31CZ-104X | C CAPACITOR | | |
| | C2530 | NCF31CZ-104X | C CAPACITOR | | |
| | C2531 | NCS31HJ-560X | C CAPACITOR | | |
| | C2532 | NCS31HJ-560X | C CAPACITOR | | |
| | C2533 | NEA71CM-226X | E.CAPACITOR | | |
| | C2534 | NEA71CM-226X | E.CAPACITOR | | |
| | C2539 | NCF31CZ-104X | C CAPACITOR | | |
| | C2540 | NCF31CZ-104X | C CAPACITOR | | |
| | C2541 | NCS31HJ-560X | C CAPACITOR | | |
| | C2542 | NCS31HJ-560X | C CAPACITOR | | |
| | C2543 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2544 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2549 | NCF31CZ-104X | C CAPACITOR | | |
| | C2550 | NCF31CZ-104X | C CAPACITOR | | |
| | C2551 | NCS31HJ-560X | C CAPACITOR | | |
| | C2552 | NCS31HJ-560X | C CAPACITOR | | |
| | C2553 | NCB31HK-562X | C CAPACITOR | | |
| | C2554 | NCB31HK-562X | C CAPACITOR | | |
| | C2555 | NCF31CZ-104X | C CAPACITOR | | |
| | C2556 | NCF31CZ-104X | C CAPACITOR | | |
| | C2559 | NCF31CZ-104X | C CAPACITOR | | |
| | C2560 | NCF31CZ-104X | C CAPACITOR | | |
| | C2561 | NEA71HM-105X | E.CAPACITOR | | |
| | C2562 | NEA71HM-105X | E.CAPACITOR | | |
| | C2563 | NCS31HJ-220X | C CAPACITOR | | |
| | C2564 | NCS31HJ-220X | C CAPACITOR | | |
| | C2569 | NCF31CZ-104X | C CAPACITOR | | |
| | C2570 | NCF31CZ-104X | C CAPACITOR | | |
| | C2571 | NCB31CK-103X | C CAPACITOR | | |
| | C2572 | NCB31CK-103X | C CAPACITOR | | |
| | C2573 | NCB31HK-272X | C CAPACITOR | | |
| | C2574 | NCB31HK-272X | C CAPACITOR | | |
| | C2575 | NCB31HK-392X | C CAPACITOR | | |

■ **Electrical parts list (DSP board)** **Block No. 03**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C2576 | NCB31HK-392X | C CAPACITOR | | |
| | C2577 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2578 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2579 | NCF31CZ-104X | C CAPACITOR | | |
| | C2580 | NCF31CZ-104X | C CAPACITOR | | |
| | C2581 | NEA71HM-105X | E.CAPACITOR | | |
| | C2582 | NEA71CM-106X | E.CAPACITOR | | |
| | C2583 | NCS31HJ-220X | C CAPACITOR | | |
| | C2584 | NCS31HJ-560X | C CAPACITOR | | |
| | C2589 | NCF31CZ-104X | C CAPACITOR | | |
| | C2590 | NCF31CZ-104X | C CAPACITOR | | |
| | C2591 | NCB31CK-103X | C CAPACITOR | | |
| | C2592 | NCB31HK-223X | C CAPACITOR | | |
| | C2593 | NCB31HK-272X | C CAPACITOR | | |
| | C2594 | NCB31CK-104X | C CAPACITOR | | |
| | C2595 | NCB31HK-392X | C CAPACITOR | | |
| | C2597 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2598 | NEA71EM-475X | E.CAPACITOR. | | |
| | C2599 | NCF31CZ-104X | C CAPACITOR | | |
| | C2600 | NCF31CZ-104X | C CAPACITOR | | |
| | D 601 | 1SS355-X | DIODE | | |
| | D 602 | 1SS355-X | DIODE | | |
| | D 607 | 1SS355-X | DIODE | | |
| | D 608 | 1SS355-X | DIODE | | |
| | IC501 | BA15218F-XE | IC | | |
| | IC510 | BA15218F-XE | IC | | |
| | IC511 | BA15218F-XE | IC | | |
| | IC521 | BA15218F-XE | IC | | |
| | IC531 | BA15218F-XE | IC | | |
| | IC541 | BA15218F-XE | IC | | |
| | IC551 | BA15218F-XE | IC | | |
| | IC561 | BA15218F-XE | IC | | |
| | IC571 | BA15218F-XE | IC | | |
| | IC581 | BA15218F-XE | IC | | |
| | IC591 | BA15218F-XE | IC | | |
| | IC601 | AK4527VQ | IC | | |
| | IC602 | BU4066BCF-X | IC | | |
| | IC611 | BU4066BCF-X | IC | | |
| | IC621 | TC7SU04FU-X | IC | | |
| | IC622 | TC7SU04FU-X | IC | | |
| | IC631 | TC9446F-014 | IC | | |
| | IC641 | W24L011AJ-15-X | IC | | |
| | IC671 | UPD784215AGC103 | 1C | | |
| | IC672 | TC7SET32FU-X | IC | | |
| | IC681 | PQ3DZ53-X | IC | | |
| | IC683 | PQ3DZ53-X | IC | | |
| | J 601 | QNN0347-001 | PIN JACK | | |
| | K 501 | NQR0269-007X | FERRITE BEADS | | |
| | K 502 | NQR0269-007X | FERRITE BEADS | | |
| | K 503 | NQR0269-007X | FERRITE BEADS | | |
| | K 504 | NQR0269-007X | FERRITE BEADS | | |
| | K 531 | NQR0269-007X | FERRITE BEADS | | |
| | K 532 | NQR0269-007X | FERRITE BEADS | | |
| | K 541 | NQR0269-007X | FERRITE BEADS | | |
| | K 542 | NQR0269-007X | FERRITE BEADS | | |
| | K 561 | NQR0269-007X | FERRITE BEADS | | |
| | K 562 | NQR0269-007X | FERRITE BEADS | | |
| | K 581 | NQR0269-007X | FERRITE BEADS | | |
| | K 582 | NQR0269-007X | FERRITE BEADS | | |
| | K 601 | NQR0269-007X | FERRITE BEADS | | |
| | K 611 | NQR0269-007X | FERRITE BEADS | | |
| | K 612 | NQR0269-007X | FERRITE BEADS | | |
| | K 613 | NQR0269-007X | FERRITE BEADS | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | K 614 | NQR0269-007X | FERRITE BEADS | | |
| | K 615 | NQR0269-007X | FERRITE BEADS | | |
| | K 616 | NQR0269-007X | FERRITE BEADS | | |
| | K 617 | NQR0269-007X | FERRITE BEADS | | |
| | K 618 | NQR0269-007X | FERRITE BEADS | | |
| | K 619 | NQR0269-007X | FERRITE BEADS | | |
| | K 620 | NQR0269-007X | FERRITE BEADS | | |
| | K 621 | NQR0269-007X | FERRITE BEADS | | |
| | K 622 | NQR0269-007X | FERRITE BEADS | | |
| | K 687 | NQR0319-001X | F.BEADS C.M | | |
| | L 661 | NQL024J-470X | INDUCTOR CM | | |
| | L 662 | NQL024J-470X | INDUCTOR CM | | |
| | L 663 | NQL024J-470X | INDUCTOR CM | | |
| | LC601 | NQR0321-001X | EMI FILTER C.M | | |
| | LC632 | NQR0321-001X | EMI FILTER C.M | | |
| | LC641 | NQR0321-001X | EMI FILTER C.M | | |
| | LC671 | NQR0321-001X | EMI FILTER C.M | | |
| | Q 601 | DTC114YE-X | TRANSISTOR | | |
| | Q 607 | DTA144EKA-X | TRANSISTOR | | |
| | Q 670 | DTC114YE-X | TRANSISTOR | | |
| | Q 672 | DTC114YE-X | TRANSISTOR | | |
| | Q 674 | DTC114YE-X | TRANSISTOR | | |
| | Q 675 | DTC114YE-X | TRANSISTOR | | |
| | Q2501 | DTA144EKA-X | TRANSISTOR | | |
| | Q2521 | 2SD1328/ST/-X | TRANSISTOR | | |
| | Q2522 | 2SD1328/ST/-X | TRANSISTOR | | |
| | Q2561 | 2SD1328/ST/-X | TRANSISTOR | | |
| | Q2562 | 2SD1328/ST/-X | TRANSISTOR | | |
| | Q2581 | 2SD1328/ST/-X | TRANSISTOR | | |
| | Q2582 | 2SD1328/ST/-X | TRANSISTOR | | |
| | R 601 | NRSA63J-473X | MG RESISTOR | | |
| | R 602 | NRSA63J-473X | MG RESISTOR | | |
| | R 603 | NRSA63J-473X | MG RESISTOR | | |
| | R 604 | NRSA63J-473X | MG RESISTOR | | |
| | R 605 | NRSA63J-473X | MG RESISTOR | | |
| | R 606 | NRSA63J-221X | MG RESISTOR | | |
| | R 607 | NRSA63J-221X | MG RESISTOR | | |
| | R 608 | NRSA63J-221X | MG RESISTOR | | |
| | R 609 | NRSA63J-221X | MG RESISTOR | | |
| | R 610 | NRSA63J-221X | MG RESISTOR | | |
| | R 611 | NRSA63J-332X | MG RESISTOR | | |
| | R 612 | NRSA63J-223X | MG RESISTOR | | |
| | R 613 | NRSA63J-822X | MG RESISTOR | | |
| | R 615 | NRSA63J-432X | MG RESISTOR | | |
| | R 617 | NRSA63J-103X | MG RESISTOR | | |
| | R 618 | NRSA63J-103X | MG RESISTOR | | |
| | R 619 | NRSA63J-221X | MG RESISTOR | | |
| | R 620 | NRSA63J-221X | MG RESISTOR | | |
| | R 621 | NRSA63J-221X | MG RESISTOR | | |
| | R 622 | NRSA63J-750X | MG RESISTOR | | |
| | R 623 | NRSA63J-101X | MG RESISTOR | | |
| | R 625 | NRSA63J-101X | MG RESISTOR | | |
| | R 627 | NRSA63J-472X | MG RESISTOR | | |
| | R 628 | NRSA63J-183X | MG RESISTOR | | |
| | R 633 | NRSA63J-221X | MG RESISTOR | | |
| | R 636 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 637 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 639 | NRSA63J-472X | MG RESISTOR | | |
| | R 641 | NRSA63J-102X | MG RESISTOR | | |
| | R 642 | NRSA63J-103X | MG RESISTOR | | |
| | R 643 | NRSA63J-101X | MG RESISTOR | | |
| | R 644 | NRSA63J-563X | MG RESISTOR | | |
| | R 645 | NRSA63J-102X | MG RESISTOR | | |

■ **Electrical parts list (DSP board)** **Block No. 03**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 646 | NRSA63J-103X | MG RESISTOR | | |
| | R 647 | NRSA63J-225X | MG RESISTOR | | |
| | R 648 | NRSA63J-472X | MG RESISTOR | | |
| | R 649 | NRSA63J-1R0X | MG RESISTOR | | |
| | R 650 | NRSA63J-1R0X | MG RESISTOR | | |
| | R 657 | NRSA63J-103X | MG RESISTOR | | |
| | R 661 | NRSA63J-221X | MG RESISTOR | | |
| | R 662 | NRSA63J-221X | MG RESISTOR | | |
| | R 663 | NRSA63J-221X | MG RESISTOR | | |
| | R 664 | NRSA63J-221X | MG RESISTOR | | |
| | R 669 | NRSA63J-103X | MG RESISTOR | | |
| | R 670 | NRSA63J-103X | MG RESISTOR | | |
| | R 673 | NRSA63J-563X | MG RESISTOR | | |
| | R 674 | NRSA63J-432X | MG RESISTOR | | |
| | R 675 | NRSA63J-432X | MG RESISTOR | | |
| | R 676 | NRSA63J-432X | MG RESISTOR | | |
| | R 677 | NRSA63J-104X | MG RESISTOR | | |
| | R 678 | NRSA63J-822X | MG RESISTOR | | |
| | R 679 | NRSA63J-822X | MG RESISTOR | | |
| | R 680 | NRSA63J-822X | MG RESISTOR | | |
| | R 681 | NRSA63J-103X | MG RESISTOR | | |
| | R 682 | NRSA63J-103X | MG RESISTOR | | |
| | R 683 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 685 | NRSA63J-103X | MG RESISTOR | | |
| | R 687 | NRSA63J-102X | MG RESISTOR | | |
| | R 691 | NRSA63J-104X | MG RESISTOR | | |
| | R 692 | NRSA63J-104X | MG RESISTOR | | |
| | R 695 | NRSA63J-104X | MG RESISTOR | | |
| | R 696 | NRSA63J-104X | MG RESISTOR | | |
| | R 697 | NRSA63J-104X | MG RESISTOR | | |
| | R 698 | NRSA63J-104X | MG RESISTOR | | |
| | R2500 | NRSA63J-222X | MG RESISTOR | | |
| | R2501 | NRSA63J-104X | MG RESISTOR | | |
| | R2502 | NRSA63J-104X | MG RESISTOR | | |
| | R2503 | NRSA63J-183X | MG RESISTOR | | |
| | R2504 | NRSA63J-183X | MG RESISTOR | | |
| | R2505 | NRSA63J-103X | MG RESISTOR | | |
| | R2506 | NRSA63J-103X | MG RESISTOR | | |
| | R2507 | NRSA63J-103X | MG RESISTOR | | |
| | R2508 | NRSA63J-103X | MG RESISTOR | | |
| | R2509 | NRSA63J-103X | MG RESISTOR | | |
| | R2510 | NRSA63J-103X | MG RESISTOR | | |
| | R2511 | NRSA63J-102X | MG RESISTOR | | |
| | R2512 | NRSA63J-102X | MG RESISTOR | | |
| | R2513 | NRSA63J-102X | MG RESISTOR | | |
| | R2514 | NRSA63J-102X | MG RESISTOR | | |
| | R2515 | NRSA63J-102X | MG RESISTOR | | |
| | R2516 | NRSA63J-102X | MG RESISTOR | | |
| | R2517 | NRSA63J-102X | MG RESISTOR | | |
| | R2518 | NRSA63J-102X | MG RESISTOR | | |
| | R2519 | NRSA63J-102X | MG RESISTOR | | |
| | R2520 | NRSA63J-102X | MG RESISTOR | | |
| | R2521 | NRSA63J-102X | MG RESISTOR | | |
| | R2522 | NRSA63J-102X | MG RESISTOR | | |
| | R2523 | NRSA63J-102X | MG RESISTOR | | |
| | R2524 | NRSA63J-102X | MG RESISTOR | | |
| | R2525 | NRSA63J-102X | MG RESISTOR | | |
| | R2526 | NRSA63J-102X | MG RESISTOR | | |
| | R2527 | NRSA63J-104X | MG RESISTOR | | |
| | R2528 | NRSA63J-104X | MG RESISTOR | | |
| | R2529 | NRSA63J-103X | MG RESISTOR | | |
| | R2530 | NRSA63J-103X | MG RESISTOR | | |
| | R2531 | NRSA63J-113X | MG RESISTOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R2532 | NRSA63J-113X | MG RESISTOR | | |
| | R2533 | NRSA63J-103X | MG RESISTOR | | |
| | R2534 | NRSA63J-103X | MG RESISTOR | | |
| | R2535 | NRSA63J-103X | MG RESISTOR | | |
| | R2536 | NRSA63J-103X | MG RESISTOR | | |
| | R2537 | NRSA63J-104X | MG RESISTOR | | |
| | R2538 | NRSA63J-104X | MG RESISTOR | | |
| | R2541 | NRSA63J-113X | MG RESISTOR | | |
| | R2542 | NRSA63J-113X | MG RESISTOR | | |
| | R2543 | NRSA63J-103X | MG RESISTOR | | |
| | R2544 | NRSA63J-103X | MG RESISTOR | | |
| | R2545 | NRSA63J-562X | MG RESISTOR | | |
| | R2546 | NRSA63J-562X | MG RESISTOR | | |
| | R2547 | NRSA63J-104X | MG RESISTOR | | |
| | R2548 | NRSA63J-104X | MG RESISTOR | | |
| | R2551 | NRSA63J-103X | MG RESISTOR | | |
| | R2552 | NRSA63J-103X | MG RESISTOR | | |
| | R2553 | NRSA63J-333X | MG RESISTOR | | |
| | R2554 | NRSA63J-333X | MG RESISTOR | | |
| | R2560 | NRSA63J-105X | MG RESISTOR | | |
| | R2561 | NRSA63J-104X | MG RESISTOR | | |
| | R2562 | NRSA63J-104X | MG RESISTOR | | |
| | R2563 | NRSA63J-103X | MG RESISTOR | | |
| | R2564 | NRSA63J-103X | MG RESISTOR | | |
| | R2565 | NRSA63J-122X | MG RESISTOR | | |
| | R2566 | NRSA63J-122X | MG RESISTOR | | |
| | R2567 | NRSA63J-103X | MG RESISTOR | | |
| | R2568 | NRSA63J-103X | MG RESISTOR | | |
| | R2571 | NRSA63J-102X | MG RESISTOR | | |
| | R2572 | NRSA63J-102X | MG RESISTOR | | |
| | R2573 | NRSA63J-102X | MG RESISTOR | | |
| | R2574 | NRSA63J-102X | MG RESISTOR | | |
| | R2575 | NRSA63J-102X | MG RESISTOR | | |
| | R2576 | NRSA63J-102X | MG RESISTOR | | |
| | R2577 | NRSA63J-104X | MG RESISTOR | | |
| | R2578 | NRSA63J-104X | MG RESISTOR | | |
| | R2581 | NRSA63J-104X | MG RESISTOR | | |
| | R2582 | NRSA63J-104X | MG RESISTOR | | |
| | R2583 | NRSA63J-103X | MG RESISTOR | | |
| | R2584 | NRSA63J-124X | MG RESISTOR | | |
| | R2585 | NRSA63J-122X | MG RESISTOR | | |
| | R2586 | NRSA63J-392X | MG RESISTOR | | |
| | R2587 | NRSA63J-103X | MG RESISTOR | | |
| | R2588 | NRSA63J-103X | MG RESISTOR | | |
| | R2590 | NRSA63J-333X | MG RESISTOR | | |
| | R2591 | NRSA63J-102X | MG RESISTOR | | |
| | R2592 | NRSA63J-333X | MG RESISTOR | | |
| | R2593 | NRSA63J-102X | MG RESISTOR | | |
| | R2594 | NRSA63J-333X | MG RESISTOR | | |
| | R2595 | NRSA63J-102X | MG RESISTOR | | |
| | R2596 | NRSA63J-102X | MG RESISTOR | | |
| | R2597 | NRSA63J-104X | MG RESISTOR | | |
| | R2598 | NRSA63J-104X | MG RESISTOR | | |
| | UN661 | GP1FA550RZ | OPT RECEIVER | | |
| | UN662 | GP1FA550RZ | OPT RECEIVER | | |
| | UN663 | GP1FA550TZ | OPT TRANSMITTER | | |
| | X 631 | NAX0385-001X | CRYSTAL | 22.5792MHZ | |
| | X 671 | NAX0275-001X | C OSCIALLATOR | 6.14MHZ | |

■ **Electrical parts list (DVD mecha board)** **Block No. 04**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 17 | NCS31HJ-101X | C.CAPACITOR | | |
| | C 18 | NCS31HJ-101X | C.CAPACITOR | | |
| | C 19 | NCS31HJ-101X | C.CAPACITOR | | |
| | CN 11 | QGF1016F2-37W | CONNECTOR | TO MAIN | |
| | CN 12 | QGF1016C2-21W | CONNECTOR | TO MECHA | |
| | CN 13 | QGF1016F2-17W | CONNECTOR | TO MECHA | |
| | K 11 | NQR0265-003X | FERRITE BEADS | | |
| | K 12 | NQR0265-003X | FERRITE BEADS | | |
| | K 13 | NQR0265-003X | FERRITE BEADS | | |
| | K 14 | NQR0265-003X | FERRITE BEADS | | |
| | K 15 | NQR0265-003X | FERRITE BEADS | | |
| | K 16 | NQR0265-002X | FERRITE BEADS | | |
| | K 21 | NQR0265-003X | FERRITE BEADS | | |
| | K 22 | NQR0265-003X | FERRITE BEADS | | |
| | R 21 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 23 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 24 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 25 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 26 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 28 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 30 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 31 | NRSA63J-0R0X | MG RESISTOR | | |

■ **Electrical parts list (DVD board)** **Block No. 05**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 1 | QCS31HJ-331Z | C CAPACITOR | 330PF 5% 50V | |
| | C 5 | NCB21CK-104X | C.CAPACITOR | | |
| | C 6 | NCB21CK-104X | C.CAPACITOR | | |
| | C 7 | NCS21HJ-151X | C CAPACITOR | | |
| | C 8 | NCB21CK-104X | C.CAPACITOR | | |
| | C 101 | NCB31CK-104X | C CAPACITOR | | |
| | C 102 | NEA70JM-476X | E.CAPACITOR | | |
| | C 103 | NCB31CK-104X | C CAPACITOR | | |
| | C 104 | NCS31HJ-560X | C CAPACITOR | | |
| | C 105 | NCS31HJ-101X | C.CAPACITOR | | |
| | C 106 | NEA71CM-106X | E.CAPACITOR | | |
| | C 107 | NCB31CK-104X | C CAPACITOR | | |
| | C 108 | NCB31CK-104X | C CAPACITOR | | |
| | C 109 | NCB31CK-104X | C CAPACITOR | | |
| | C 110 | NCS31HJ-101X | C.CAPACITOR | | |
| | C 111 | NCB21CK-184X | C CAPACITOR | | |
| | C 112 | NCB31CK-104X | C CAPACITOR | | |
| | C 113 | NCB31CK-104X | C CAPACITOR | | |
| | C 114 | NCB31CK-104X | C CAPACITOR | | |
| | C 115 | NCB31HK-392X | C CAPACITOR | | |
| | C 116 | NCB31CK-104X | C CAPACITOR | | |
| | C 117 | NCB11CK-105X | C CAPACITOR | | |
| | C 118 | NEX40JM-336X | E CAPACITOR | | |
| | C 119 | NCB31CK-104X | C CAPACITOR | | |
| | C 120 | NCB31CK-104X | C CAPACITOR | | |
| | C 121 | NCB21CK-334X | C CAPACITOR | | |
| | C 122 | NCS31HJ-121X | C CAPACITOR | | |
| | C 123 | NCB31CK-104X | C CAPACITOR | | |
| | C 124 | NCB31CK-104X | C CAPACITOR | | |
| | C 125 | NCB31CK-104X | C CAPACITOR | | |
| | C 126 | NCS31HJ-221X | C CAPACITOR | | |
| | C 127 | NCS31HJ-221X | C CAPACITOR | | |
| | C 128 | NCB31CK-104X | C CAPACITOR | | |
| | C 129 | NCB21CK-224X | C CAPACITOR | | |
| | C 130 | NCB31HK-102X | C CAPACITOR | | |
| | C 131 | NCB31HK-681X | C CAPACITOR | | |
| | C 132 | NCB31CK-104X | C CAPACITOR | | |
| | C 133 | NEX40JM-566X | E CAPACITOR | | |
| | C 134 | NCB11CK-105X | C CAPACITOR | | |
| | C 135 | NCS31HJ-221X | C CAPACITOR | | |
| | C 136 | NCB31CK-104X | C CAPACITOR | | |
| | C 137 | NCB31CK-104X | C CAPACITOR | | |
| | C 138 | NCB31CK-104X | C CAPACITOR | | |
| | C 139 | NCB31CK-104X | C CAPACITOR | | |
| | C 140 | NCB31CK-104X | C CAPACITOR | | |
| | C 141 | NCS31HJ-820X | C CAPACITOR | | |
| | C 142 | NCB31HK-222X | C CAPACITOR | | |
| | C 143 | NCB21CK-224X | C CAPACITOR | | |
| | C 144 | NCB31CK-104X | C CAPACITOR | | |
| | C 145 | NCB11CK-105X | C CAPACITOR | | |
| | C 151 | NEX40JM-156X | E.CAPACITOR | | |
| | C 152 | NEX40JM-156X | E.CAPACITOR | | |
| | C 153 | NCB31CK-104X | C CAPACITOR | | |
| | C 154 | NCB31CK-104X | C CAPACITOR | | |
| | C 191 | NCB31CK-104X | C CAPACITOR | | |
| | C 192 | NEA70JM-107X | E.CAPACITOR | | |
| | C 201 | NCB31CK-104X | C CAPACITOR | | |
| | C 202 | NCB31CK-393X | C CAPACITOR | | |
| | C 203 | NCB31CK-393X | C CAPACITOR | | |
| | C 204 | NCB31CK-393X | C CAPACITOR | | |
| | C 205 | NCB31CK-393X | C CAPACITOR | | |
| | C 206 | NCB31CK-104X | C CAPACITOR | | |
| | C 208 | NCB31CK-104X | C CAPACITOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 209 | NCB31CK-104X | C CAPACITOR | | |
| | C 210 | NCB31CK-104X | C CAPACITOR | | |
| | C 211 | NCB31CK-104X | C CAPACITOR | | |
| | C 212 | NCB31CK-104X | C CAPACITOR | | |
| | C 213 | NCB31CK-104X | C CAPACITOR | | |
| | C 214 | NCB31CK-104X | C CAPACITOR | | |
| | C 215 | NCB31HK-392X | C CAPACITOR | | |
| | C 217 | NCB31HK-821X | C CAPACITOR | | |
| | C 218 | NCB31HK-331X | C CAPACITOR | | |
| | C 219 | NCB31HK-471X | C CAPACITOR | | |
| | C 221 | NCB31HK-271X | C CAPACITOR | | |
| | C 222 | NCB31HK-821X | C CAPACITOR | | |
| | C 223 | NCB31HK-821X | C CAPACITOR | | |
| | C 224 | NEA70JM-226X | E CAPACITOR | | |
| | C 225 | NCB11CK-105X | C CAPACITOR | | |
| | C 226 | NCB31CK-104X | C CAPACITOR | | |
| | C 227 | NCB31CK-104X | C CAPACITOR | | |
| | C 228 | NEA70JM-107X | E.CAPACITOR | | |
| | C 229 | NCB11CK-105X | C CAPACITOR | | |
| | C 230 | NCB31CK-104X | C CAPACITOR | | |
| | C 231 | NCB31CK-104X | C CAPACITOR | | |
| | C 232 | NCB31CK-104X | C CAPACITOR | | |
| | C 233 | NCS31HJ-330X | C CAPACITOR | | |
| | C 234 | NCB31HK-331X | C CAPACITOR | | |
| | C 235 | NCB31CK-104X | C CAPACITOR | | |
| | C 236 | NCB31CK-823X | C CAPACITOR | | |
| | C 237 | NCB31CK-823X | C CAPACITOR | | |
| | C 241 | NCB31CK-104X | C CAPACITOR | | |
| | C 242 | NEA70JM-107X | E.CAPACITOR | | |
| | C 251 | NCB31CK-104X | C CAPACITOR | | |
| | C 252 | NCB31CK-104X | C CAPACITOR | | |
| | C 253 | NCB31CK-104X | C CAPACITOR | | |
| | C 254 | NCB31CK-104X | C CAPACITOR | | |
| | C 255 | NEA70JM-226X | E CAPACITOR | | |
| | C 256 | NCB31CK-104X | C CAPACITOR | | |
| | C 257 | NCB31CK-104X | C CAPACITOR | | |
| | C 258 | NEA71CM-226X | E.CAPACITOR | | |
| | C 259 | NCB31CK-104X | C CAPACITOR | | |
| | C 261 | NCB31CK-104X | C CAPACITOR | | |
| | C 262 | NCB31CK-104X | C CAPACITOR | | |
| | C 263 | NCB31CK-104X | C CAPACITOR | | |
| | C 264 | NCB31CK-104X | C CAPACITOR | | |
| | C 271 | NCB31CK-104X | C CAPACITOR | | |
| | C 273 | NCB31HK-102X | C CAPACITOR | | |
| | C 275 | NCB31HK-102X | C CAPACITOR | | |
| | C 276 | NCB31CK-104X | C CAPACITOR | | |
| | C 281 | NEA70JM-226X | E CAPACITOR | | |
| | C 282 | NCB31CK-104X | C CAPACITOR | | |
| | C 284 | NCB31HK-102X | C CAPACITOR | | |
| | C 286 | NCB31HK-102X | C CAPACITOR | | |
| | C 287 | NCB31CK-104X | C CAPACITOR | | |
| | C 288 | NEA71CM-226X | E.CAPACITOR | | |
| | C 291 | NCB31CK-104X | C CAPACITOR | | |
| | C 292 | NEA71CM-476X | E CAPACITOR | | |
| | C 301 | NCB31CK-104X | C CAPACITOR | | |
| | C 302 | NCB31CK-104X | C CAPACITOR | | |
| | C 303 | NCB31CK-104X | C CAPACITOR | | |
| | C 304 | NCB31CK-104X | C CAPACITOR | | |
| | C 305 | NCB31CK-104X | C CAPACITOR | | |
| | C 306 | NCB31CK-104X | C CAPACITOR | | |
| | C 307 | NCB31CK-104X | C CAPACITOR | | |
| | C 308 | NCB31CK-103X | C CAPACITOR | | |
| | C 309 | NCB31CK-104X | C CAPACITOR | | |

■ **Electrical parts list (DVD board)** **Block No. 05**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 310 | NCB31CK-104X | C CAPACITOR | | |
| | C 311 | NCB31CK-104X | C CAPACITOR | | |
| | C 314 | NCB31CK-104X | C CAPACITOR | | |
| | C 315 | NCB31CK-104X | C CAPACITOR | | |
| | C 316 | NEA70JM-107X | E.CAPACITOR | | |
| | C 317 | NCB11CK-105X | C CAPACITOR | | |
| | C 318 | NCB31CK-104X | C CAPACITOR | | |
| | C 319 | NCB31CK-104X | C CAPACITOR | | |
| | C 320 | NCB31CK-104X | C CAPACITOR | | |
| | C 321 | NCB31CK-104X | C CAPACITOR | | |
| | C 322 | NEA70JM-107X | E.CAPACITOR | | |
| | C 323 | NCB11CK-105X | C CAPACITOR | | |
| | C 324 | NCB31CK-104X | C CAPACITOR | | |
| | C 341 | NCB31CK-104X | C CAPACITOR | | |
| | C 342 | NCB31CK-104X | C CAPACITOR | | |
| | C 343 | NCB31CK-104X | C CAPACITOR | | |
| | C 344 | NCB31CK-104X | C CAPACITOR | | |
| | C 371 | NCS31HJ-100X | C CAPACITOR | | |
| | C 372 | NCS31HJ-100X | C CAPACITOR | | |
| | C 373 | NCB31CK-104X | C CAPACITOR | | |
| | C 374 | NCB31CK-104X | C CAPACITOR | | |
| | C 376 | NCB31CK-104X | C CAPACITOR | | |
| | C 391 | NCB31CK-104X | C CAPACITOR | | |
| | C 392 | NEA70JM-226X | E CAPACITOR | | |
| | C 401 | NCB31CK-104X | C CAPACITOR | | |
| | C 402 | NCB31CK-104X | C CAPACITOR | | |
| | C 405 | NCB31CK-104X | C CAPACITOR | | |
| | C 406 | NCB31CK-104X | C CAPACITOR | | |
| | C 407 | NCB31CK-104X | C CAPACITOR | | |
| | C 408 | NEA70JM-226X | E CAPACITOR | | |
| | C 409 | NCB31CK-104X | C CAPACITOR | | |
| | C 411 | NCB31CK-104X | C CAPACITOR | | |
| | C 412 | NCB31CK-104X | C CAPACITOR | | |
| | C 441 | NCB31CK-104X | C CAPACITOR | | |
| | C 442 | NEX40JM-156X | E.CAPACITOR | | |
| | C 452 | NCB31CK-104X | C CAPACITOR | | |
| | C 491 | NCB31CK-104X | C CAPACITOR | | |
| | C 492 | NEA70JM-226X | E CAPACITOR | | |
| | C 501 | NCB31CK-104X | C CAPACITOR | | |
| | C 502 | NCB31CK-104X | C CAPACITOR | | |
| | C 503 | NCB31CK-104X | C CAPACITOR | | |
| | C 504 | NCB31CK-104X | C CAPACITOR | | |
| | C 505 | NCB31CK-104X | C CAPACITOR | | |
| | C 506 | NCB31CK-104X | C CAPACITOR | | |
| | C 507 | NCB31CK-104X | C CAPACITOR | | |
| | C 508 | NCB31CK-104X | C CAPACITOR | | |
| | C 509 | NCB31CK-104X | C CAPACITOR | | |
| | C 510 | NCB31CK-104X | C CAPACITOR | | |
| | C 511 | NCB31CK-104X | C CAPACITOR | | |
| | C 512 | NCB31CK-104X | C CAPACITOR | | |
| | C 513 | NCB31CK-104X | C CAPACITOR | | |
| | C 514 | NCB31CK-104X | C CAPACITOR | | |
| | C 515 | NCB31CK-104X | C CAPACITOR | | |
| | C 516 | NCB31CK-104X | C CAPACITOR | | |
| | C 517 | NCB31CK-104X | C CAPACITOR | | |
| | C 518 | NCB31CK-104X | C CAPACITOR | | |
| | C 519 | NCB31CK-104X | C CAPACITOR | | |
| | C 520 | NCB31CK-104X | C CAPACITOR | | |
| | C 521 | NCB31CK-104X | C CAPACITOR | | |
| | C 522 | NCB31CK-104X | C CAPACITOR | | |
| | C 523 | NCB31CK-104X | C CAPACITOR | | |
| | C 524 | NCB31CK-104X | C CAPACITOR | | |
| | C 525 | NCB31CK-104X | C CAPACITOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 526 | NCB31CK-104X | C CAPACITOR | | |
| | C 527 | NCB31CK-104X | C CAPACITOR | | |
| | C 528 | NCB31CK-104X | C CAPACITOR | | |
| | C 529 | NCB31CK-104X | C CAPACITOR | | |
| | C 530 | NEA70JM-107X | E.CAPACITOR | | |
| | C 531 | NCB31CK-104X | C CAPACITOR | | |
| | C 532 | NCB31CK-104X | C CAPACITOR | | |
| | C 533 | NCB31CK-104X | C CAPACITOR | | |
| | C 534 | NEA70JM-107X | E.CAPACITOR | | |
| | C 535 | NCB31CK-104X | C CAPACITOR | | |
| | C 536 | NCB31CK-103X | C CAPACITOR | | |
| | C 537 | NEA70JM-226X | E CAPACITOR | | |
| | C 538 | NCB31CK-104X | C CAPACITOR | | |
| | C 539 | NCB31CK-104X | C CAPACITOR | | |
| | C 540 | NEA70JM-226X | E CAPACITOR | | |
| | C 541 | NCB31CK-104X | C CAPACITOR | | |
| | C 542 | NEA70JM-226X | E CAPACITOR | | |
| | C 543 | NCB31CK-104X | C CAPACITOR | | |
| | C 551 | NCB31CK-104X | C CAPACITOR | | |
| | C 552 | NCB31CK-104X | C CAPACITOR | | |
| | C 553 | NCB31CK-104X | C CAPACITOR | | |
| | C 554 | NCB31CK-104X | C CAPACITOR | | |
| | C 555 | NEA70JM-226X | E CAPACITOR | | |
| | C 556 | NCB31CK-104X | C CAPACITOR | | |
| | C 557 | NCB31CK-104X | C CAPACITOR | | |
| | C 558 | NEA70JM-226X | E CAPACITOR | | |
| | C 559 | NCB31CK-104X | C CAPACITOR | | |
| | C 561 | NCB31CK-104X | C CAPACITOR | | |
| | C 562 | NEA70JM-226X | E CAPACITOR | | |
| | C 563 | NCB31CK-104X | C CAPACITOR | | |
| | C 564 | NCB31CK-104X | C CAPACITOR | | |
| | C 565 | NCB31CK-104X | C CAPACITOR | | |
| | C 566 | NCB31CK-104X | C CAPACITOR | | |
| | C 567 | NEA70JM-226X | E CAPACITOR | | |
| | C 568 | NCB31CK-104X | C CAPACITOR | | |
| | C 569 | NEA70JM-226X | E CAPACITOR | | |
| | C 571 | NCB31CK-104X | C CAPACITOR | | |
| | C 572 | NEX40JM-156X | E.CAPACITOR | | |
| | CN101 | QGF1016C2-37W | CONNECTOR | MECHA | |
| | CN103 | QGF1016C2-07W | CONNECTOR | LOADING | |
| | CN104 | QGA2001C2-12X | W TO B CONNE | | |
| | CN501 | QGA2001C2-08X | W TO B CONNE | POWER | |
| | CN502 | QGF1016C2-35W | CONNECTOR | SYSTEM | |
| | CN503 | QGA2001C2-10X | W TO B CONNE | VIDEO | |
| | D 201 | 1SS355-X | DIODE | | |
| | D 202 | 1SS355-X | DIODE | | |
| | D 203 | 1SS355-X | DIODE | | |
| | D 272 | DAP202K-X | D.TRANSISTOR | | |
| | D 402 | 1SS355-X | DIODE | | |
| | D 403 | 1SS355-X | DIODE | | |
| | D 551 | 1SS355-X | DIODE | | |
| | D 552 | 1SS355-X | DIODE | | |
| | IC101 | AN8706FHQ | IC | | |
| | IC102 | RN5RZ20BA-X | IC | | |
| | IC201 | MN67705EA | IC | | |
| | IC251 | AN8485SB-W | IC | | |
| | IC271 | BA5983FM-X | IC | | |
| | IC301 | MN103007BGA | IC | | |
| | IC311 | TC7SH08FU-X | IC | | |
| | IC312 | TC7SH32FU-X | IC | | |
| | IC321 | TC7WH74FU-X | IC | | |
| | IC322 | TC74VHC00FT-X | IC | | |
| | IC371 | TC7SHU04FU-X | IC(DIGITAL) | | |

■ **Electrical parts list (DVD board)** **Block No. 05**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | IC372 | TC7SHU04FU-X | IC(DIGITAL) | | |
| | IC374 | TC7WH74FU-X | IC | | |
| | IC401 | MN102L25GHJ | IC C.M. | | |
| | IC402 | MSM531622F78G-X | IC | | |
| | IC403 | AK93C65AF-X | IC | | |
| | IC452 | TC7WT125FU-X | IC(DIGITAL) | | |
| | IC501 | ZIVA-3-PD0 | IC | | |
| | IC502 | NAX0265-001X | IC | 27MHZ | |
| | IC503 | TC74VHC00FT-X | IC | | |
| | IC504 | HY57V161610DTC8 | IC | HYUNDAI | |
| | IC505 | HY57V161610DTC8 | IC | HYUNDAI | |
| | IC551 | JCE8011 | IC(DIGITAL) | | |
| | IC552 | MN4777AS-XE | IC C.M | | |
| | IC553 | MSM531622F82G-X | IC | | |
| | IC554 | MC44724AVFU | IC | | |
| | IC555 | MC33269D-X | IC C.M | | |
| | K 101 | NQR0007-002X | FERRITE BEADS | | |
| | K 102 | NQR0007-002X | FERRITE BEADS | | |
| | K 103 | NQR0007-002X | FERRITE BEADS | | |
| | K 155 | NQR0007-002X | FERRITE BEADS | | |
| | K 156 | NQR0007-002X | FERRITE BEADS | | |
| | K 157 | NQR0007-002X | FERRITE BEADS | | |
| | K 158 | NQR0007-002X | FERRITE BEADS | | |
| | K 159 | NQR0007-002X | FERRITE BEADS | | |
| | K 160 | NQR0007-002X | FERRITE BEADS | | |
| | K 201 | NQR0007-002X | FERRITE BEADS | | |
| | K 202 | NQR0007-002X | FERRITE BEADS | | |
| | K 251 | NQR0007-002X | FERRITE BEADS | | |
| | K 271 | NQR0007-002X | FERRITE BEADS | | |
| | K 301 | NQR0007-002X | FERRITE BEADS | | |
| | K 302 | NQR0007-002X | FERRITE BEADS | | |
| | K 371 | NQR0007-002X | FERRITE BEADS | | |
| | K 401 | NQR0007-002X | FERRITE BEADS | | |
| | K 402 | NQR0007-002X | FERRITE BEADS | | |
| | K 501 | NQR0007-002X | FERRITE BEADS | | |
| | K 502 | NQR0007-002X | FERRITE BEADS | | |
| | K 503 | NQR0007-002X | FERRITE BEADS | | |
| | K 504 | NQR0201-001X | FERRITE BEADS | | |
| | K 505 | NQR0269-001X | FERRITE BEADS | | |
| | K 550 | NQR0007-002X | FERRITE BEADS | | |
| | K 551 | NQR0007-002X | FERRITE BEADS | | |
| | K 552 | NQR0007-002X | FERRITE BEADS | | |
| | K 553 | NQR0007-002X | FERRITE BEADS | | |
| | K 554 | NQR0007-002X | FERRITE BEADS | | |
| | K 555 | NQR0007-002X | FERRITE BEADS | | |
| | K 556 | NQR0007-002X | FERRITE BEADS | | |
| | K 557 | NQR0007-002X | FERRITE BEADS | | |
| | K 558 | NQR0007-002X | FERRITE BEADS | | |
| | K 559 | NQR0007-002X | FERRITE BEADS | | |
| | K 561 | NQR0007-002X | FERRITE BEADS | | |
| | K 562 | NQR0007-002X | FERRITE BEADS | | |
| | K 563 | NQR0007-002X | FERRITE BEADS | | |
| | K 564 | NQR0007-002X | FERRITE BEADS | | |
| | K 565 | NQR0007-002X | FERRITE BEADS | | |
| | K 566 | NQR0007-002X | FERRITE BEADS | | |
| | K 567 | NQR0007-002X | FERRITE BEADS | | |
| | K 568 | NQR0007-002X | FERRITE BEADS | | |
| | K 569 | NQR0007-002X | FERRITE BEADS | | |
| | K 570 | NQR0007-002X | FERRITE BEADS | | |
| | K 571 | NQR0007-002X | FERRITE BEADS | | |
| | K 572 | NQR0007-002X | FERRITE BEADS | | |
| | K 573 | NQR0007-002X | FERRITE BEADS | | |
| | K 574 | NQR0007-002X | FERRITE BEADS | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | K 575 | NQR0007-002X | FERRITE BEADS | | |
| | K 576 | NQR0007-002X | FERRITE BEADS | | |
| | K 577 | NQR0007-002X | FERRITE BEADS | | |
| | K 578 | NQR0007-002X | FERRITE BEADS | | |
| | K 579 | NQR0007-002X | FERRITE BEADS | | |
| | K 581 | NQR0007-002X | FERRITE BEADS | | |
| | K 582 | NQR0007-002X | FERRITE BEADS | | |
| | K 583 | NQR0007-002X | FERRITE BEADS | | |
| | K 584 | NQR0007-002X | FERRITE BEADS | | |
| | K 585 | NQR0007-002X | FERRITE BEADS | | |
| | K 586 | NQR0007-002X | FERRITE BEADS | | |
| | K 587 | NQR0007-002X | FERRITE BEADS | | |
| | K 589 | NQR0007-002X | FERRITE BEADS | | |
| | K 590 | NQR0007-002X | FERRITE BEADS | | |
| | K 591 | NQR0007-002X | FERRITE BEADS | | |
| | K 592 | NQR0007-002X | FERRITE BEADS | | |
| | L 191 | NQL044K-100X | INDUCTOR | | |
| | L 241 | NQL044K-100X | INDUCTOR | | |
| | Q 101 | 2SB1424/QR/-X | TRANSISTOR | | |
| | Q 102 | DTC124EE-X | DIGI TRANSISTOR | | |
| | Q 103 | DTA124EE-X | DIGI TRANSISTOR | | |
| | Q 104 | DTC124EE-X | DIGI TRANSISTOR | | |
| | Q 105 | DTC144EE-X | TRANSISTOR | | |
| | Q 251 | DTC144EE-X | TRANSISTOR | | |
| | Q 252 | DTC144EE-X | TRANSISTOR | | |
| | Q 253 | DTC144EE-X | TRANSISTOR | | |
| | Q 254 | DTC144EE-X | TRANSISTOR | | |
| | Q 255 | DTC144EE-X | TRANSISTOR | | |
| | R 101 | NRS125J-270X | MG RESISTOR | | |
| | R 102 | NRS125J-2R2X | MG RESISTOR | | |
| | R 103 | NRSA63J-123X | MG RESISTOR | | |
| | R 104 | NRSA63J-103X | MG RESISTOR | | |
| | R 106 | NRSA63J-223X | MG RESISTOR | | |
| | R 108 | NRSA63J-103X | MG RESISTOR | | |
| | R 109 | NRSA63J-823X | MG RESISTOR | | |
| | R 110 | NRSA63J-393X | MG RESISTOR | | |
| | R 112 | NRVA63D-123X | MG RESISTOR | | |
| | R 113 | NRSA63J-393X | MG RESISTOR | | |
| | R 114 | NRSA63J-272X | MG RESISTOR | | |
| | R 115 | NRSA63J-223X | MG RESISTOR | | |
| | R 116 | NRSA63J-103X | MG RESISTOR | | |
| | R 117 | NRSA63J-223X | MG RESISTOR | | |
| | R 118 | NRSA63J-153X | MG RESISTOR | | |
| | R 119 | NRSA63J-155X | MG RESISTOR | | |
| | R 120 | NRVA63D-332X | MF RESISTOR | | |
| | R 121 | NRSA63J-474X | MG RESISTOR | | |
| | R 122 | NRSA63J-474X | MG RESISTOR | | |
| | R 123 | NRSA63J-822X | MG RESISTOR | | |
| | R 124 | NRSA63J-183X | MG RESISTOR | | |
| | R 125 | NRSA63J-154X | MG RESISTOR | | |
| | R 126 | NRSA63J-564X | MG RESISTOR | | |
| | R 127 | NRSA63J-123X | MG RESISTOR | | |
| | R 128 | NRSA63J-223X | MG RESISTOR | | |
| | R 129 | NRSA63J-103X | MG RESISTOR | | |
| | R 130 | NRSA63J-822X | MG RESISTOR | | |
| | R 131 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 151 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 152 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 153 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 154 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 201 | NRSA63J-102X | MG RESISTOR | | |
| | R 202 | NRSA63J-102X | MG RESISTOR | | |
| | R 203 | NRSA63J-102X | MG RESISTOR | | |

■ **Electrical parts list (DVD board)** **Block No. 05**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 204 | NRSA63J-102X | MG RESISTOR | | |
| | R 205 | NRSA63J-473X | MG RESISTOR | | |
| | R 206 | NRSA63J-102X | MG RESISTOR | | |
| | R 207 | NRSA63J-473X | MG RESISTOR | | |
| | R 208 | NRSA63J-102X | MG RESISTOR | | |
| | R 209 | NRSA63J-473X | MG RESISTOR | | |
| | R 210 | NRSA63J-473X | MG RESISTOR | | |
| | R 211 | NRSA63J-102X | MG RESISTOR | | |
| | R 212 | NRSA63J-102X | MG RESISTOR | | |
| | R 213 | NRSA63J-183X | MG RESISTOR | | |
| | R 214 | NRSA63J-822X | MG RESISTOR | | |
| | R 215 | NRSA63J-473X | MG RESISTOR | | |
| | R 216 | NRSA63J-473X | MG RESISTOR | | |
| | R 217 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 218 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 219 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 220 | NRSA63J-472X | MG RESISTOR | | |
| | R 221 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 222 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 223 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 224 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 225 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 226 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 227 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 228 | NRSA63J-103X | MG RESISTOR | | |
| | R 229 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 230 | NRSA63J-103X | MG RESISTOR | | |
| | R 231 | NRVA63D-683X | MF RESISTOR | | |
| | R 232 | NRVA63D-683X | MF RESISTOR | | |
| | R 233 | NRSA63J-103X | MG RESISTOR | | |
| | R 234 | NRSA63J-103X | MG RESISTOR | | |
| | R 235 | NRSA63J-473X | MG RESISTOR | | |
| | R 236 | NRSA63J-123X | MG RESISTOR | | |
| | R 237 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 238 | NRSA63J-223X | MG RESISTOR | | |
| | R 239 | NRSA63J-333X | MG RESISTOR | | |
| | R 240 | NRSA63J-333X | MG RESISTOR | | |
| | R 241 | NRVA63D-362X | MG RESISTOR | | |
| | R 242 | NRSA63J-102X | MG RESISTOR | | |
| | R 243 | NRSA63J-472X | MG RESISTOR | | |
| | R 244 | NRSA63J-102X | MG RESISTOR | | |
| | R 245 | NRVA63D-103X | MF RESISTER | | |
| | R 246 | NRVA63D-183X | MG RESISTOR | | |
| | R 247 | NRVA63D-103X | MF RESISTER | | |
| | R 248 | NRVA63D-183X | MG RESISTOR | | |
| | R 249 | NRSA63J-102X | MG RESISTOR | | |
| | R 251 | NRSA63J-271X | MG RESISTOR | | |
| | R 252 | NRSA63J-271X | MG RESISTOR | | |
| | R 253 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 254 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 255 | NRSA63J-103X | MG RESISTOR | | |
| | R 256 | NRSA63J-103X | MG RESISTOR | | |
| | R 257 | NRSA63J-103X | MG RESISTOR | | |
| | R 258 | NRSA63J-103X | MG RESISTOR | | |
| | R 259 | NRSA63J-103X | MG RESISTOR | | |
| | R 260 | NRSA63J-562X | MG RESISTOR | | |
| | R 261 | NRSA63J-563X | MG RESISTOR | | |
| | R 262 | NRS125J-R47X | MG RESISTOR | | |
| | R 263 | NRSA63J-103X | MG RESISTOR | | |
| | R 264 | NRSA63J-103X | MG RESISTOR | | |
| | R 267 | NRSA63J-103X | MG RESISTOR | | |
| | R 268 | NRS181J-2R2X | MG RESISTOR | | |
| | R 271 | NRSA63J-243X | MG RESISTOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 272 | NRSA63J-103X | MG RESISTOR | | |
| | R 273 | NRSA63J-103X | MG RESISTOR | | |
| | R 274 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 275 | NRSA63J-243X | MG RESISTOR | | |
| | R 276 | NRSA63J-103X | MG RESISTOR | | |
| | R 277 | NRSA63J-103X | MG RESISTOR | | |
| | R 278 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 279 | NRSA63J-473X | MG RESISTOR | | |
| | R 280 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 282 | NRSA63J-273X | MG RESISTOR | | |
| | R 283 | NRSA63J-103X | MG RESISTOR | | |
| | R 284 | NRSA63J-103X | MG RESISTOR | | |
| | R 285 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 286 | NRSA63J-273X | MG RESISTOR | | |
| | R 287 | NRSA63J-103X | MG RESISTOR | | |
| | R 288 | NRSA63J-103X | MG RESISTOR | | |
| | R 289 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 290 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 301 | NRSA63J-473X | MG RESISTOR | | |
| | R 302 | NRSA63J-473X | MG RESISTOR | | |
| | R 303 | NRSA63J-473X | MG RESISTOR | | |
| | R 304 | NRSA63J-473X | MG RESISTOR | | |
| | R 305 | NRSA63J-473X | MG RESISTOR | | |
| | R 306 | NRSA63J-473X | MG RESISTOR | | |
| | R 307 | NRSA63J-473X | MG RESISTOR | | |
| | R 308 | NRSA63J-473X | MG RESISTOR | | |
| | R 310 | NRSA63J-102X | MG RESISTOR | | |
| | R 311 | NRSA63J-102X | MG RESISTOR | | |
| | R 312 | NRSA63J-102X | MG RESISTOR | | |
| | R 313 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 314 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 317 | NRSA63J-473X | MG RESISTOR | | |
| | R 318 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 319 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 322 | NRSA63J-473X | MG RESISTOR | | |
| | R 324 | NRSA63J-473X | MG RESISTOR | | |
| | R 328 | NRSA63J-473X | MG RESISTOR | | |
| | R 342 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 343 | NRSA63J-102X | MG RESISTOR | | |
| | R 371 | NRSA63J-105X | MG RESISTOR | | |
| | R 372 | NRSA63J-101X | MG RESISTOR | | |
| | R 373 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 401 | NRSA63J-102X | MG RESISTOR | | |
| | R 402 | NRSA63J-102X | MG RESISTOR | | |
| | R 403 | NRSA63J-472X | MG RESISTOR | | |
| | R 405 | NRSA63J-472X | MG RESISTOR | | |
| | R 408 | NRSA63J-472X | MG RESISTOR | | |
| | R 410 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 411 | NRSA63J-472X | MG RESISTOR | | |
| | R 412 | NRSA63J-472X | MG RESISTOR | | |
| | R 413 | NRSA63J-472X | MG RESISTOR | | |
| | R 414 | NRSA63J-472X | MG RESISTOR | | |
| | R 415 | NRSA63J-472X | MG RESISTOR | | |
| | R 416 | NRSA63J-472X | MG RESISTOR | | |
| | R 418 | NRSA63J-472X | MG RESISTOR | | |
| | R 420 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 421 | NRSA63J-0R0X | M.G.RESISTOR | | EE |
| | R 422 | NRSA63J-0R0X | M.G.RESISTOR | | EE |
| | R 423 | NRSA63J-0R0X | MG RESISTOR | | B,E,EN |
| | R 424 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 431 | NRSA63J-472X | MG RESISTOR | | |
| | R 432 | NRSA63J-472X | MG RESISTOR | | |
| | R 461 | NRSA63J-0R0X | MG RESISTOR | | |

■ **Electrical parts list (DVD board)** **Block No. 05**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 462 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 491 | NRSA63J-472X | MG RESISTOR | | |
| | R 492 | NRSA63J-472X | MG RESISTOR | | |
| | R 501 | NRSA63J-102X | MG RESISTOR | | |
| | R 502 | NRSA63J-222X | MG RESISTOR | | |
| | R 503 | NRSA63J-103X | MG RESISTOR | | |
| | R 504 | NRSA63J-330X | MG RESISTOR | | |
| | R 505 | NRSA63J-330X | MG RESISTOR | | |
| | R 506 | NRSA63J-330X | MG RESISTOR | | |
| | R 507 | NRSA63J-330X | MG RESISTOR | | |
| | R 508 | NRSA63J-330X | MG RESISTOR | | |
| | R 509 | NRSA63J-330X | MG RESISTOR | | |
| | R 510 | NRSA63J-330X | MG RESISTOR | | |
| | R 511 | NRSA63J-330X | MG RESISTOR | | |
| | R 512 | NRSA63J-330X | MG RESISTOR | | |
| | R 513 | NRSA63J-330X | MG RESISTOR | | |
| | R 514 | NRSA63J-330X | MG RESISTOR | | |
| | R 515 | NRSA63J-330X | MG RESISTOR | | |
| | R 516 | NRSA63J-330X | MG RESISTOR | | |
| | R 517 | NRSA63J-330X | MG RESISTOR | | |
| | R 518 | NRSA63J-330X | MG RESISTOR | | |
| | R 519 | NRSA63J-330X | MG RESISTOR | | |
| | R 520 | NRSA63J-330X | MG RESISTOR | | |
| | R 521 | NRSA63J-330X | MG RESISTOR | | |
| | R 522 | NRSA63J-330X | MG RESISTOR | | |
| | R 523 | NRSA63J-181X | MG RESISTOR | | |
| | R 524 | NRSA63J-181X | MG RESISTOR | | |
| | R 525 | NRSA63J-181X | MG RESISTOR | | |
| | R 526 | NRSA63J-181X | MG RESISTOR | | |
| | R 527 | NRSA63J-181X | MG RESISTOR | | |
| | R 528 | NRSA63J-181X | MG RESISTOR | | |
| | R 529 | NRSA63J-181X | MG RESISTOR | | |
| | R 530 | NRSA63J-181X | MG RESISTOR | | |
| | R 531 | NRSA63J-330X | MG RESISTOR | | |
| | R 532 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 533 | NRSA63J-330X | MG RESISTOR | | |
| | R 534 | NRSA63J-330X | MG RESISTOR | | |
| | R 535 | NRSA63J-330X | MG RESISTOR | | |
| | R 536 | NRSA63J-330X | MG RESISTOR | | |
| | R 537 | NRSA63J-330X | MG RESISTOR | | |
| | R 538 | NRSA63J-330X | MG RESISTOR | | |
| | R 539 | NRSA63J-330X | MG RESISTOR | | |
| | R 540 | NRSA63J-330X | MG RESISTOR | | |
| | R 541 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 542 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 543 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 544 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 545 | NRSA63J-472X | MG RESISTOR | | |
| | R 546 | NRSA63J-332X | MG RESISTOR | | |
| | R 547 | NRSA63J-222X | MG RESISTOR | | |
| | R 548 | NRSA63J-332X | MG RESISTOR | | |
| | R 550 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 554 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 555 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 557 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 558 | NRSA63J-102X | MG RESISTOR | | |
| | R 559 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 561 | NRVA63D-221X | MMF RESISTOR | | |
| | R 564 | NRVA63D-152X | MG RESISTOR | | |
| | R 565 | NRVA63D-332X | MF RESISTOR | | |
| | R 567 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 568 | NRVA63D-221X | MMF RESISTOR | CB OUT | |
| | R 569 | NRVA63D-221X | MMF RESISTOR | CR OUT | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 570 | NRVA63D-221X | MMF RESISTOR | | |
| | R 571 | NRSA63J-100X | MG RESISTOR | | |
| | R 572 | NRSA63J-181X | MG RESISTOR | | |
| | R 573 | NRSA63J-181X | MG RESISTOR | | |
| | R 574 | NRSA63J-181X | MG RESISTOR | | |
| | R 575 | NRSA63J-181X | MG RESISTOR | | |
| | R 576 | NRSA63J-181X | MG RESISTOR | | |
| | R 577 | NRSA63J-181X | MG RESISTOR | | |
| | R 578 | NRSA63J-181X | MG RESISTOR | | |
| | R 579 | NRSA63J-181X | MG RESISTOR | | |
| | R 580 | NRSA63J-181X | MG RESISTOR | | |
| | R 581 | NRSA63J-101X | MG RESISTOR | | |
| | R 582 | NRSA63J-0R0X | MG RESISTOR | | |
| | R 583 | NRVA63D-471X | CMF RESISTOR | | |
| | R 584 | NRVA63D-103X | MF RESISTER | | |
| | R 585 | NRVA63D-471X | CMF RESISTOR | | |
| | SP 1 | PU59915-105 | SPACER | | |
| | X 371 | NAX0277-002X | CRYSTAL | | |
| | X 401 | NAX0331-001X | C RESONATOR | | |

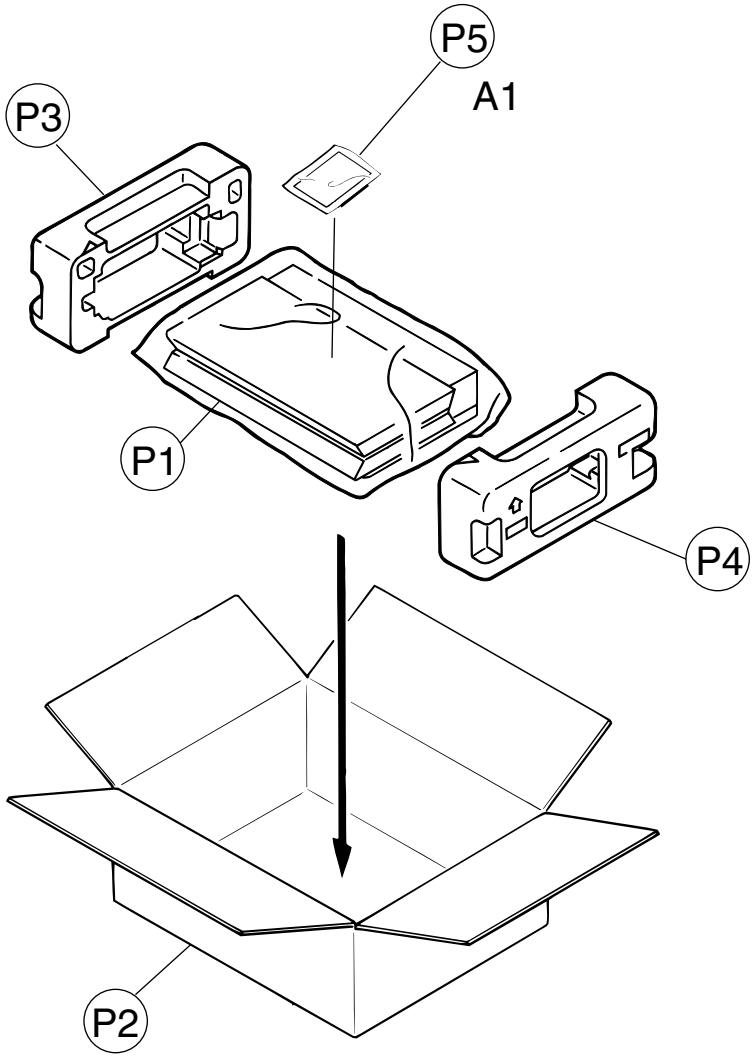
■ **Electrical parts list (Tuner board)** **Block No. 06**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | AT101 | QNB0014-001 | ANT TERMINAL | | |
| | C 101 | NCB21HK-103X | C CAPACITOR | | |
| | C 103 | NCB21HK-223X | C CAPACITOR | | |
| | C 105 | NCB21HK-223X | C CAPACITOR | | |
| | C 107 | QEKC1CM-226Z | E CAPACITOR | 22MF 20% 16V | |
| | C 111 | NCB21HK-473X | C CAPACITOR | | |
| | C 112 | NDC21HJ-120X | C CAPACITOR | | |
| | C 113 | QCSB1HJ-120Y | C CAPACITOR | 12PF 5% 50V | |
| | C 121 | NDC21HJ-120X | C CAPACITOR | | |
| | C 122 | NDC21HJ-120X | C CAPACITOR | | |
| | C 123 | NCB21HK-473X | C CAPACITOR | | |
| | C 126 | NCS21HJ-101X | C CAPACITOR | | |
| | C 128 | QENC1HM-474Z | NP E.CAPACITOR | .47MF 20% 50V | |
| | C 129 | NCB21HK-102X | C CAPACITOR | | |
| | C 130 | QEKC1AM-107Z | E.CAPACITOR | 100MF 20% 10V | |
| | C 133 | QEKC1CM-226Z | E CAPACITOR | 22MF 20% 16V | |
| | C 134 | NCB21HK-222X | C CAPACITOR | | |
| | C 135 | NCB21HK-223X | C CAPACITOR | | |
| | C 136 | QEKC1HM-105Z | E.CAPACITOR | 1.0MF 20% 50V | |
| | C 137 | NCS21HJ-680X | C CAPACITOR | | |
| | C 139 | NCB21HK-393X | C CAPACITOR | | |
| | C 140 | NCB21HK-393X | C CAPACITOR | | |
| | C 141 | NCB21HK-473X | C CAPACITOR | | |
| | C 143 | NCB21HK-223X | C CAPACITOR | | |
| | C 144 | NCB21HK-473X | C CAPACITOR | | |
| | C 146 | QEKC1HM-105Z | E.CAPACITOR | 1.0MF 20% 50V | |
| | C 147 | QEKC1HM-105Z | E.CAPACITOR | 1.0MF 20% 50V | |
| | C 148 | QEKC1HM-224Z | E.CAPACITOR | .22MF 20% 50V | |
| | C 149 | QEKC1HM-105Z | E.CAPACITOR | 1.0MF 20% 50V | |
| | C 150 | QEKC1CM-226Z | E CAPACITOR | 22MF 20% 16V | |
| | C 156 | QDGB1HK-102Y | C CAPACITOR | | |
| | C 157 | NCB21HK-473X | C CAPACITOR | | |
| | C 158 | QEKC1CM-226Z | E CAPACITOR | 22MF 20% 16V | |
| | C 161 | QEK41CM-106 | E.CAPACITOR | 10MF 20% 16V | |
| | C 162 | QEK41CM-106 | E.CAPACITOR | 10MF 20% 16V | |
| | C 163 | NCB21HK-223X | C CAPACITOR | | |
| | C 164 | NCB21HK-473X | C CAPACITOR | | |
| | C 168 | QEKC1HM-105Z | E.CAPACITOR | 1.0MF 20% 50V | |
| | C 184 | QEKC1CM-107Z | E.CAPACITOR | 100MF 20% 16V | |
| | C 185 | QEK41CM-106 | E.CAPACITOR | 10MF 20% 16V | |
| | C 186 | QEK41CM-106 | E.CAPACITOR | 10MF 20% 16V | |
| | C 191 | NCS21HJ-820X | C CAPACITOR | | |
| | C 192 | NCS21HJ-470X | C CAPACITOR | | |
| | C 193 | NCB21HK-561X | C CAPACITOR | | |
| | C 194 | NCB21HK-104X | C CAPACITOR | | |
| | C 195 | NCB21HK-331X | C.CAPA. C.M | | |
| | C 196 | QEKC1HM-225Z | E.CAPACITOR | 2.2MF 20% 50V | |
| | C 197 | NCB21HK-473X | C CAPACITOR | | |
| | C 199 | QEK41CM-106 | E.CAPACITOR | 10MF 20% 16V | |
| | CF101 | QAX0285-001Z | C.FILTER | | |
| | CF102 | QAX0285-001Z | C.FILTER | | |
| | CF103 | QAX0519-001Z | C FILTER | | |
| | CN111 | QGB2501K2-12 | CONECTOR | | |
| | CN112 | QGB2501K1-04 | CONNECTOR | | |
| | D 121 | 1SS133-T2 | SI DIODE | | |
| | D 123 | 1SS133-T2 | SI DIODE | | |
| | D 129 | 1SS133-T2 | SI DIODE | | |
| | D 131 | 1SS133-T2 | SI DIODE | | |
| | IC102 | LA1838 | IC | | |
| | IC121 | LC72136N | IC | | |
| | IC191 | SAA6588 | IC(RDS) | | |
| | L 112 | QQL231K-2R7Y | INDUCTOR | | |
| | Q 102 | 2SC535/BC/-T | TRANSISTOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | Q 103 | 2SC461/BC/-T | TRANSISTOR | | |
| | Q 111 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 112 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 113 | DTA114YKA-X | TRANSISTOR | | |
| | Q 121 | KRA103M-T | TRANSISTOR * | | |
| | R 103 | NRSA02J-101X | MG RESISTOR | | |
| | R 104 | NRSA02J-272X | MG RESISTOR | | |
| | R 105 | NRSA02J-391X | MG RESISTOR | | |
| | R 106 | NRSA02J-102X | MG RESISTOR | | |
| | R 107 | NRSA02J-561X | MG RESISTOR | | |
| | R 108 | NRSA02J-332X | MG RESISTOR | | |
| | R 109 | NRSA02J-221X | MG RESISTOR | | |
| | R 111 | NRSA02J-472X | MG RESISTOR | | |
| | R 112 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 114 | NRSA02J-122X | MG RESISTOR | | |
| | R 115 | NRSA02J-104X | MG RESISTOR | | |
| | R 119 | NRSA02J-103X | MG RESISTOR | | |
| | R 122 | NRSA02J-472X | MG RESISTOR | | |
| | R 124 | NRSA02J-222X | MG RESISTOR | | |
| | R 126 | NRSA02J-562X | MG RESISTOR | | |
| | R 127 | NRSA02J-822X | MG RESISTOR | | |
| | R 128 | NRSA02J-472X | MG RESISTOR | | |
| | R 129 | NRSA02J-222X | MG RESISTOR | | |
| | R 130 | QRZ9005-680X | F.RESISTOR | 68 1/4W | |
| | R 132 | NRSA02J-393X | MG RESISTOR | | |
| | R 133 | NRSA02J-392X | MG RESISTOR | | |
| | R 134 | NRSA02J-102X | MG RESISTOR | | |
| | R 140 | NRSA02J-563X | MG RESISTOR | | |
| | R 141 | NRSA02J-102X | MG RESISTOR | | |
| | R 142 | NRSA02J-470X | MG RESISTOR | | |
| | R 143 | NRSA02J-562X | MG RESISTOR | | |
| | R 144 | NRSA02J-332X | MG RESISTOR | | |
| | R 145 | NRSA02J-103X | MG RESISTOR | | |
| | R 146 | NRSA02J-472X | MG RESISTOR | | |
| | R 147 | NRSA02J-332X | MG RESISTOR | | |
| | R 150 | NRSA02J-331X | MG RESISTOR | | |
| | R 157 | NRSA02J-272X | MG RESISTOR | | |
| | R 158 | NRSA02J-272X | MG RESISTOR | | |
| | R 161 | NRSA02J-102X | MG RESISTOR | | |
| | R 162 | NRSA02J-102X | MG RESISTOR | | |
| | R 182 | NRSA02J-103X | MG RESISTOR | | |
| | R 183 | NRSA02J-103X | MG RESISTOR | | |
| | R 184 | NRSA02J-103X | MG RESISTOR | | |
| | R 191 | NRSA02J-102X | MG RESISTOR | | |
| | R 192 | NRSA02J-474X | MG RESISTOR | | |
| | R 193 | NRSA02J-103X | MG RESISTOR | | |
| | R 194 | NRSA02J-103X | MG RESISTOR | | |
| | RF101 | QAU0119-001 | FRONT END | FOR FTZ | |
| | T 111 | QQR0871-001 | COIL BLOCK | | |
| | T 142 | QQR0973-001 | IFT | | |
| | X 121 | QAX0402-001 | CRYSTAL | | |
| | X 191 | QAX0263-001Z | CRYSTAL | | |

# Packing materials and accessories parts list

Block No. M 3 M M
Block No. M 4 M M




## ■ Parts list (Packing)

Block No. M3MM

| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | P 1 | QPC06005515P | POLY BAG | 1 | FOR SET | |
| | P 2 | LV30580-029A | PACKING CASE | 1 | | EE |
| | | LV30580-028A | PACKING CASE | 1 | | B,E,EN |
| | P 3 | LV20651-001A | PACKING PAD(L) | 1 | | |
| | P 4 | LV20652-001A | PACKING PAD(R) | 1 | | |
| | P 5 | QPA01702503P | POLY BAG | 1 | FOR W.CARD | |

## ■ Parts list (Accessories)

Block No. M4MM

| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | A 1 | BT-54008-2 | WARRANTY CARD | 1 | | B,E,EN |
| | | BT-54012-1 | WARRANTY CARD | 1 | | EE |

# PARTS LIST

## [ SP-THA10 ]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

B ---------- U.K.
E ---------- Continental Europe
EN ---------- Northern Europe
EE ---------- Russian Federation

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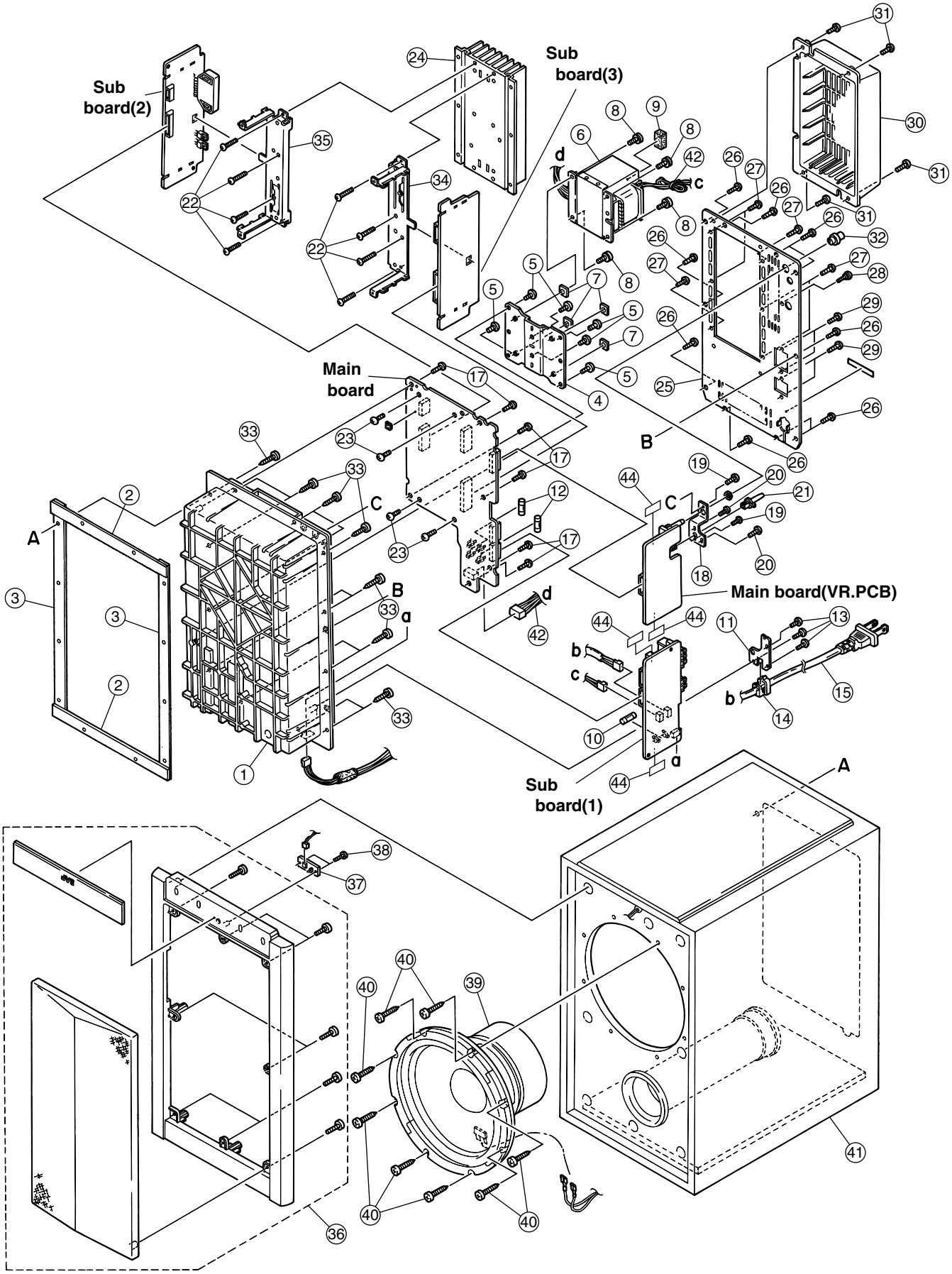
Packing materials and accessories parts list ---------- 3-34

# Exploded view of general assembly and parts list (SP-THA10)

Block No. M 5 M M



## ■ Parts list (Speaker assembly)

**Block No. M5MM**

| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | 1 | LV10337-001A | MOLD BASE | 1 | | |
| | 2 | LV30225-066A | SPACER | 2 | | |
| | 3 | LV30225-067A | SPACER | 2 | | |
| | 4 | LV31723-001A | TRANS BRACKET | 1 | | |
| | 5 | QYSBSF4008Z | SCREW | 6 | FOR TRANS BKT | |
| ⚠ | 6 | QQT0297-003 | P.TRANS | 1 | | |
| | 7 | E406309-002 | SPACER | 4 | | |
| | 8 | QYSDSTL4010E | SPECIAL SCREW | 4 | | |
| | 9 | LV30225-078A | SPACER | 1 | | |
| ⚠ | 10 | QMF51E2-2R5-J1 | FUSE | 1 | F403 | |
| | 11 | LV41686-001A | AC BRACKET | 1 | | |
| ⚠ | 12 | QMF51A2-8R0J1 | FUSE | 2 | F504,F505 | |
| | 13 | QYSBSF3008Z | SCREW | 3 | | |
| ⚠ | 14 | QHS3771-108 | CORD STOPPER | 1 | | |
| ⚠ | 15 | QMPN160-200-JD | POWER CORD | 1 | MOTHER TO H.BKT | B |
| ⚠ | | QMPK190-200-JC | POWER CORD | 1 | MOTHER TO H.BKT | E,EE,EN |
| | 17 | QYSBSF3008Z | SCREW | 6 | | |
| | 18 | LV31756-001A | VOLUME BRACKET | 1 | | |
| | 19 | QYSBSF3008Z | SCREW | 2 | FOR BOLUME BKT | |
| | 20 | QYSBST3006Z | T.SCREW | 2 | FOR PUSH SW | |
| | 21 | E407321-002SM | PUSH BUTTON | 1 | | |
| | 22 | QYSBSG3016Z | T.SCREW | 8 | FOR TRTO H/S | |
| | 23 | QYSBSG3008E | T.SCREW | 4 | MOTHER TO H/SBK | |
| ⚠ | 24 | LV20656-001A | HEAT SINK | 1 | | |
| | 25 | LV20654-005A | REAR PANEL | 1 | | B,E,EN |
| | | LV20654-006A | REAR PANEL | 1 | | EE |
| | 26 | QYSDSF3008M | SCREW | 10 | TO MOLD BASE | |
| | 27 | QYSBSGY3008E | SPECIAL SCREW | 6 | FOR H/S | |
| | 28 | E73562-003 | SPECIAL SCREW | 1 | DIN.REAR | |
| | 29 | QYSBSGY3008E | SPECIAL SCREW | 4 | FOR SPK | |
| | 30 | LV20655-001A | H.S.COVER | 1 | | |
| | 31 | QYSBSG3008M | T.SCREW | 4 | | |
| | 32 | LV30734-002A | KNOB | 1 | | |
| | 33 | QYSDSA4020M | TAP SCREW | 12 | | |
| | 34 | LV31722-003A | P.TR HOLDER | 1 | | |
| | 35 | LV31722-002A | P.TR HOLDER | 1 | | |
| | 36 | AA000017-01 | SPEAKER NET | 1 | | |
| | 37 | 6600007411 | CIR BOARD ASSY | 1 | | |
| | 38 | 7004690801 | TAPPING SCREW | 2 | | |
| | 39 | CR25000501 | SPEAKER | 1 | | |
| | 40 | 7005942502 | SCREW | 8 | | |
| | 41 | AA000016-02 | SPEAKER CABINET | 1 | | |
| | 42 | QZW0004-001 | WIRE CLAMP | 2 | FOR TRANS BKT | |
| | 43 | LV30225-093A | SPACER | 2 | | |
| | 44 | LV30225-094A | SPACER | 4 | | |

# Electrical parts list

■ **Electrical parts list (Main board)** **Block No. 07**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 100 | QTE1H06-475Z | E CAPACITOR | | |
| | C 101 | QETN1EM-476Z | E CAPACITOR | 47MF 20% 25V | |
| | C 102 | QTE1H06-475Z | E CAPACITOR | | |
| | C 103 | QETN1EM-476Z | E CAPACITOR | 47MF 20% 25V | |
| | C 104 | QETN1HM-105Z | E CAPACITOR | 1.0MF 20% 50V | |
| | C 105 | QETN1EM-476Z | E CAPACITOR | 47MF 20% 25V | |
| | C 106 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 107 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 108 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 109 | QTE1H06-475Z | E CAPACITOR | | |
| | C 110 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 111 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 112 | QTE1H06-475Z | E CAPACITOR | | |
| | C 113 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 114 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 115 | QETN1HM-105Z | E CAPACITOR | 1.0MF 20% 50V | |
| | C 116 | QETN1EM-106Z | E CAPACITOR | 10MF 20% 25V | |
| | C 118 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 119 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 120 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 121 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 122 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 123 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 124 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 125 | QCBB1HK-101Y | C CAPACITOR | 100PF 10% 50V | |
| | C 126 | QCS11HJ-100 | C CAPACITOR | 10PF 5% 50V | |
| | C 128 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 129 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 500 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 501 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 502 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 503 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 504 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 505 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 506 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 507 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 508 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 509 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 510 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 511 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 512 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 513 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 514 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 515 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 516 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 517 | QETN1EM-476Z | E CAPACITOR | 47MF 20% 25V | |
| | C 518 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 519 | QETN1EM-476Z | E CAPACITOR | 47MF 20% 25V | |
| | C 520 | QEZ0223-478 | E CAPACITER | 4700MF | |
| | C 521 | QEZ0223-478 | E CAPACITER | 4700MF | |
| | C 522 | QETM1EM-688 | E CAPACITOR | 6800MF 20% 25V | |
| | C 523 | QETM1EM-688 | E CAPACITOR | 6800MF 20% 25V | |
| | C 524 | QFLC2AJ-104Z | M CAPACITOR | .10MF 5% 100V | |
| | C 525 | QFLC2AJ-104Z | M CAPACITOR | .10MF 5% 100V | |
| | C 526 | QFLC2AJ-104Z | M CAPACITOR | .10MF 5% 100V | |
| | C 527 | QFLC2AJ-104Z | M CAPACITOR | .10MF 5% 100V | |
| | C 528 | QFLC2AJ-104Z | M CAPACITOR | .10MF 5% 100V | |
| | C 529 | QFLC2AJ-104Z | M CAPACITOR | .10MF 5% 100V | |
| | C 530 | QETN1CM-227Z | E CAPACITOR | 220MF 20% 16V | |
| | C 531 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 532 | QETN1EM-106Z | E CAPACITOR | 10MF 20% 25V | |
| | C 533 | QETN1CM-476Z | E CAPACITOR | 47MF 20% 16V | |
| | C 550 | QETN1HM-335Z | E CAPACITOR | 3.3MF 20% 50V | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 551 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 552 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 553 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 554 | QFVJ1HJ-103Z | TF CAPACITOR | .010MF 5% 50V | |
| | C 555 | QFVJ1HJ-103Z | TF CAPACITOR | .010MF 5% 50V | |
| | C 556 | QFVJ1HJ-103Z | TF CAPACITOR | .010MF 5% 50V | |
| | C 557 | QFVJ1HJ-103Z | TF CAPACITOR | .010MF 5% 50V | |
| | C 558 | QETN1HM-226Z | E CAPACITOR | 22MF 20% 50V | |
| | CN101 | QGB2510K2-12 | CONNECTOR | | |
| | CN104 | QGA3901C1-05 | 5P CONNECTOR | | |
| | CN201 | QGB2510J1-12 | CONNECTOR | | |
| | CN202 | QGB2510J1-06 | CONNECTOR | | |
| | CN203 | QGB2510J1-14 | CONNECTOR | | |
| | CN205 | EMV7163-020 | CONNECTOR | | |
| | CN206 | QGB2510J1-14 | CONNECTOR | | |
| | CN210 | QGB2510J1-10 | CONNECTOR | | |
| | CN211 | QGB2510J1-12 | CONNECTOR | | |
| | D 500 | 1SS133-T2 | SI DIODE | | |
| | D 501 | 1SS133-T2 | SI DIODE | | |
| | D 502 | MTZJ5.1C-T2 | ZENER DIODE | | |
| | D 503 | 1SS133-T2 | SI DIODE | | |
| | D 504 | 1SS133-T2 | SI DIODE | | |
| | D 505 | 1SS133-T2 | SI DIODE | | |
| | D 506 | MTZJ30C-T2 | ZENER DIODE | | |
| | D 508 | MTZJ5.1B-T2 | ZENER DIODE | | |
| | D 509 | MTZJ12C-T2 | ZENER DIODE | | |
| | D 510 | MTZJ12C-T2 | ZENER DIODE | | |
| ⚠ | D 511 | 1N5402M-20 | DIODE | | |
| ⚠ | D 512 | 1N5402M-20 | DIODE | | |
| ⚠ | D 513 | 1N5402M-20 | DIODE | | |
| ⚠ | D 514 | 1N5402M-20 | DIODE | | |
| ⚠ | D 515 | 6A20G-E4 | DIODE | | |
| ⚠ | D 516 | 6A20G-E4 | DIODE | | |
| ⚠ | D 517 | 6A20G-E4 | DIODE | | |
| ⚠ | D 518 | 6A20G-E4 | DIODE | | |
| | D 519 | 1SS133-T2 | SI DIODE | | |
| | D 520 | 1SS133-T2 | SI DIODE | | |
| | D 521 | 1SS133-T2 | SI DIODE | | |
| | D 522 | 1SS133-T2 | SI DIODE | | |
| | D 523 | MTZJ15C-T2 | Z DIODE | | |
| | D 524 | MTZJ6.2B-T2 | ZENER DIODE | | |
| | D 525 | MTZJ6.2B-T2 | ZENER DIODE | | |
| | D 526 | MTZJ15C-T2 | Z DIODE | | |
| | D 527 | 1SS133-T2 | SI DIODE | | |
| | D 528 | 1SS133-T2 | SI DIODE | | |
| | D 530 | 1SS133-T2 | SI DIODE | | |
| | D 531 | 1SS133-T2 | SI DIODE | | |
| | D 532 | MTZJ30C-T2 | ZENER DIODE | | |
| | D 533 | MTZJ6.2B-T2 | ZENER DIODE | | |
| | D 534 | 1SS133-T2 | SI DIODE | | |
| | D 535 | MTZJ15C-T2 | Z DIODE | | |
| | D 536 | 1SS133-T2 | SI DIODE | | |
| | IC100 | BA3121 | IC | | |
| | IC101 | BA3121 | IC | | |
| | IC102 | BA3121 | IC | | |
| | IC103 | BA15218N | IC | | |
| | IC108 | BA15218N | IC | | |
| | IC109 | BA15218N | IC | | |
| | IC110 | BA15218N | IC | | |
| | J 100 | QND0079-001 | DIN CONNECTOR | | |
| | K 100 | QQR0786-001Z | INDUCTOR | | |
| | K 101 | QQR0786-001Z | INDUCTOR | | |
| | Q 500 | DTA144ESA-T | DIGITAL.TR TAPE | | |

■ **Electrical parts list (Main board)** **Block No. 07**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | Q 501 | DTC114ESA-T | DIGITAL.TR TAPE | | |
| | Q 502 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 503 | DTC114ESA-T | DIGITAL.TR TAPE | | |
| | Q 504 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 505 | DTC114ESA-T | DIGITAL.TR TAPE | | |
| ⚠ | Q 506 | 2SD2037/EF/-T | TRANSISTOR | | |
| ⚠ | Q 507 | 2SA1359/OY/ | TRANSISTOR | | |
| | Q 508 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 509 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 510 | DTA114ESA-T | DIGITAL.TR TAPE | | |
| | Q 511 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 512 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 513 | DTC144ESA-T | D.TRANSISTOR | | |
| | Q 514 | DTC115ESA-T | D.TRANSISTOR | | |
| | Q 515 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 516 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 517 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 518 | DTA114TSA-T | D.TRANSISTOR | | |
| | Q 519 | DTA114TSA-T | D.TRANSISTOR | | |
| | Q 520 | 2SK105/EF/-T | TRANSISTOR(FET) | | |
| | Q 521 | 2SK105/EF/-T | TRANSISTOR(FET) | | |
| | Q 522 | KTC3199/GL/-T | TRANSISTOR | | |
| | Q 523 | DTA144ESA-T | DIGITAL.TR TAPE | | |
| | R 100 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 102 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 104 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 106 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 108 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 110 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 112 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 113 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 114 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 115 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 116 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 118 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 119 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 121 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 122 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 123 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 124 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 130 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 132 | QRE141J-123Y | C RESISTOR | 12K 5% 1/4W | |
| | R 133 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 134 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 135 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 136 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 137 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 138 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 139 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R 500 | QRE141J-392Y | C RESISTOR | 3.9K 5% 1/4W | |
| | R 501 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 502 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 504 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 505 | QRE141J-392Y | C RESISTOR | 3.9K 5% 1/4W | |
| | R 506 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 507 | QRE141J-392Y | C RESISTOR | 3.9K 5% 1/4W | |
| | R 508 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 509 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 510 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 511 | QRE141J-392Y | C RESISTOR | 3.9K 5% 1/4W | |
| | R 512 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 513 | QRE141J-392Y | C RESISTOR | 3.9K 5% 1/4W | |
| | R 514 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 515 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 516 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| ⚠ | R 517 | QRZ9005-100X | F.RESISTOR | 10 1/4W | |
| | R 518 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 519 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| ⚠ | R 520 | QRZ9005-100X | F.RESISTOR | 10 1/4W | |
| | R 521 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 522 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 523 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 524 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 525 | QRL012J-271 | UNF OMF.RES | 270 5% 1/1W | |
| | R 526 | QRE141J-122Y | C RESISTOR | 1.2K 5% 1/4W | |
| | R 527 | QRE141J-331Y | C RESISTOR | 330 5% 1/4W | |
| | R 528 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 529 | QRE141J-753Y | C RESISTOR | 75K 5% 1/4W | |
| | R 530 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 531 | QRE141J-753Y | C RESISTOR | 75K 5% 1/4W | |
| | R 532 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 533 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 534 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 535 | QRE141J-224Y | C RESISTOR | 220K 5% 1/4W | |
| ⚠ | R 536 | QRZ9006-4R7X | F RESISTOR | 4.7 1/4W | |
| | R 537 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 538 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 539 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 540 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 541 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 542 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 543 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 544 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 545 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 546 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 547 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 548 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 549 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 550 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 551 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 552 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 553 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 554 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 555 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 556 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 557 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 558 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 559 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 560 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 561 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 562 | QRE141J-101Y | C RESISTOR | 100 5% 1/4W | |
| | R 563 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 564 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 565 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 566 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 567 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 568 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 570 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | S 100 | QSW0834-001 | PUSH SW | | |
| | VR100 | QVQ0021-B14 | V.RES | | |
| | Z 500 | QNG0020-001Z | FUSE CLIP | | |
| | Z 501 | QNG0020-001Z | FUSE CLIP | | |
| | Z 502 | QNG0020-001Z | FUSE CLIP | | |
| | Z 503 | QNG0020-001Z | FUSE CLIP | | |

■ **Electrical parts list (Sub board)** **Block No. 08**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 202 | QETN1HM-105Z | E CAPACITOR | 1.0MF 20% 50V | |
| | C 203 | QFVF1HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 204 | QFVF1HJ-184Z | TF CAPACITOR | .18MF 5% 50V | |
| | C 205 | QFN31HJ-393Z | M CAPACITOR | .039MF 5% 50V | |
| | C 206 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 207 | QFVF1HJ-103Z | F CAPACITOR | .010MF 5% 50V | |
| | C 208 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 209 | QFN31HJ-471Z | M.CAPACITOR | 470PF 5% 50V | |
| | C 210 | QTE1H06-475Z | E CAPACITOR | | |
| | C 211 | QETN1HM-106Z | E CAPACITOR | 10MF 20% 50V | |
| | C 212 | QETN1HM-107Z | E CAPACITOR | 100MF 20% 50V | |
| | C 213 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 214 | QETN1HM-476Z | E CAPACITOR | 47MF 20% 50V | |
| | C 215 | QCS31HJ-3R0Z | C CAPACITOR | 3.0PF 5% 50V | |
| | C 216 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 217 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 218 | QFVF1HJ-224Z | TF CAPACITOR | .22MF 5% 50V | |
| | C 219 | QFVF1HJ-224Z | TF CAPACITOR | .22MF 5% 50V | |
| | C 223 | QCS11HJ-100 | C CAPACITOR | 10PF 5% 50V | |
| | C 225 | QETN2AM-226Z | E CAPACITOR | 22MF 20% 100V | |
| | C 226 | QFN31HJ-103Z | M CAPACITOR | .010MF 5% 50V | |
| | C 227 | QFVJ1HJ-103Z | TF CAPACITOR | .010MF 5% 50V | |
| | C 228 | QFVJ1HJ-103Z | TF CAPACITOR | .010MF 5% 50V | |
| | C 229 | QFVJ1HJ-223Z | TF CAPACITOR | .022MF 5% 50V | |
| | C 230 | QFVJ1HJ-223Z | TF CAPACITOR | .022MF 5% 50V | |
| | C 231 | QFN31HJ-103Z | M CAPACITOR | .010MF 5% 50V | |
| | C 232 | QETN1HM-475Z | E CAPACITOR | 4.7MF 20% 50V | |
| | C 233 | QFV61HJ-104Z | TF CAPACITOR | .10MF 5% 50V | |
| | C 300 | QFN31HJ-471Z | M.CAPACITOR | 470PF 5% 50V | |
| | C 301 | QETN1HM-225Z | E CAPACITOR | 2.2MF 20% 50V | |
| | C 302 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C 303 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 304 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 305 | QETN1HM-106Z | E CAPACITOR | 10MF 20% 50V | |
| | C 306 | QCSB1HK-3R3Y | C CAPACITOR | 3.3PF 10% 50V | |
| | C 307 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 308 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 309 | QETN1HM-106Z | E CAPACITOR | 10MF 20% 50V | |
| | C 310 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 311 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 312 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C 313 | QETN1HM-225Z | E CAPACITOR | 2.2MF 20% 50V | |
| | C 314 | QFN31HJ-471Z | M.CAPACITOR | 470PF 5% 50V | |
| | C 315 | QCSB1HK-3R3Y | C CAPACITOR | 3.3PF 10% 50V | |
| | C 316 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 317 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 319 | QTE1H06-475Z | E CAPACITOR | | |
| | C 320 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C 321 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 322 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 323 | QCSB1HK-3R3Y | C CAPACITOR | 3.3PF 10% 50V | |
| | C 324 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 325 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 326 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 327 | QETN1EM-107Z | E CAPACITOR | 100MF 20% 25V | |
| | C 328 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C 329 | QTE1H06-475Z | E CAPACITOR | | |
| | C 330 | QFN31HJ-471Z | M.CAPACITOR | 470PF 5% 50V | |
| | C 331 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 332 | QCSB1HK-3R3Y | C CAPACITOR | 3.3PF 10% 50V | |
| | C 333 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 334 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 336 | QTE1H06-475Z | E CAPACITOR | | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | C 337 | QCBB1HK-221Y | C CAPACITOR | 220PF 10% 50V | |
| | C 338 | QCSB1HK-3R3Y | C CAPACITOR | 3.3PF 10% 50V | |
| | C 339 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 340 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 350 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 351 | QETN1EM-226Z | E CAPACITOR | 22MF 20% 25V | |
| | C 352 | QFN31HJ-392Z | M.CAPACITOR | 3900PF 5% 50V | |
| | C 353 | QFN31HJ-392Z | M.CAPACITOR | 3900PF 5% 50V | |
| ⚠ | C 400 | QFZ9051-103 | MM CAPACITOR | .010MF | |
| | C 402 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 403 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 404 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 405 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 406 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 407 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 408 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 409 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 410 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 411 | QFLM1HJ-104Z | M CAPACITOR | .10MF 5% 50V | |
| | C 412 | QETN1HM-105Z | E CAPACITOR | 1.0MF 20% 50V | |
| | CN102 | QGB2510K2-06 | CONNECTOR | | |
| | CN103 | QGB2510K2-14 | CONNECTOR | | |
| | CN105 | EMV5163-020R | SOCKET | | |
| | CN106 | QGB2510K2-14 | CONNECTOR | | |
| | CN107 | QGA7901C1-02 | CONNECTOR | | |
| | CN108 | QGA7901C1-02 | CONNECTOR | | |
| | CN109 | QGA3901F2-04 | CONNECTOR | | |
| | CN110 | QGB2510K2-10 | CONNECTOR | | |
| | CN111 | QGB2510K2-12 | CONNECTOR | | |
| | D 202 | 1SS133-T2 | SI DIODE | | |
| | D 203 | 1SS133-T2 | SI DIODE | | |
| ⚠ | D 204 | 1N5402M-20 | DIODE | | |
| | D 205 | MTZJ15C-T2 | Z DIODE | | |
| | D 206 | MTZJ6.2B-T2 | ZENER DIODE | | |
| | D 207 | 1SS133-T2 | SI DIODE | | |
| | D 208 | SLR-325MG-T | LED I M | | |
| | D 209 | SLR-325MG-T | LED I M | | |
| | D 210 | 1SS133-T2 | SI DIODE | | |
| | D 211 | 1SS133-T2 | SI DIODE | | |
| | D 212 | MTZJ6.2B-T2 | ZENER DIODE | | |
| | D 214 | MTZJ15C-T2 | Z DIODE | | |
| ⚠ | D 215 | 1N5402M-20 | DIODE | | |
| | D 216 | 1SS133-T2 | SI DIODE | | |
| | D 217 | MTZJ6.2B-T2 | ZENER DIODE | | |
| | D 218 | 1SS133-T2 | SI DIODE | | |
| | D 219 | 1SS133-T2 | SI DIODE | | |
| | D 300 | 1SS133-T2 | SI DIODE | | |
| | D 301 | 1SS133-T2 | SI DIODE | | |
| | D 302 | 1SS133-T2 | SI DIODE | | |
| | D 303 | 1SS133-T2 | SI DIODE | | |
| | D 304 | 1SS133-T2 | SI DIODE | | |
| | D 400 | 1SS133-T2 | SI DIODE | | |
| | D 401 | 1SR35-400A-T5 | DIODE I/M | | |
| | IC104 | BA15218N | IC | | |
| ⚠ | IC105 | STK404-130 | IC | | |
| ⚠ | IC106 | STK402-030 | IC | | |
| ⚠ | IC107 | STK402-230 | IC | | |
| | IC201 | BA15218N | IC | | |
| | IC202 | BA15218N | IC | | |
| | J 101 | QNB0065-002 | SPK TERMINAL | | |
| | J 102 | QNB0070-002 | SPK TERMINAL | | |
| | L 200 | QQLZ003-1R0 | INDUCTOR | | |
| | L 300 | QQLZ003-1R0 | INDUCTOR | | |

■ **Electrical parts list (Sub board)** **Block No. 08**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | L 301 | QQLZ003-1R0 | INDUCTOR | | |
| | L 302 | QQLZ003-1R0 | INDUCTOR | | |
| | L 303 | QQLZ003-1R0 | INDUCTOR | | |
| | L 304 | QQLZ003-1R0 | INDUCTOR | | |
| | LC400 | QQR0797-002 | INDUCTOR | | |
| | LC401 | QQR0797-002 | INDUCTOR | | |
| | LC402 | QQLZ005-R45 | INDUCTOR | | |
| | LC403 | QQLZ005-R45 | INDUCTOR | | |
| | LC404 | QQLZ005-R45 | INDUCTOR | | |
| | MR200 | QRZ0197-R22 | EMIT.RESISTOR | 1/1W | |
| | Q 202 | 2SA1038S/SE/-T | TRANSISTOR | | |
| | Q 204 | 2SK2391 | POW.MOS-FET | | |
| | Q 205 | DTA114TSA-T | D.TRANSISTOR | | |
| | Q 206 | 2SC2389S/SE/-T | TRANSISTOR | | |
| | Q 207 | 2SA1038S/SE/-T | TRANSISTOR | | |
| | Q 208 | 2SK2391 | POW.MOS-FET | | |
| | Q 209 | 2SC2389S/SE/-T | TRANSISTOR | | |
| | Q 210 | 2SK105/EF/-T | TRANSISTOR(FET) | | |
| | Q 211 | DTC114TSA-T | D.TRANSISTOR | | |
| | Q 300 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 301 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 302 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 303 | KTA1267/YG/-T | TRANSISTOR | | |
| | Q 304 | KTA1267/YG/-T | TRANSISTOR | | |
| | R 200 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 201 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 208 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 209 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 210 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 211 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 212 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 213 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 214 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 215 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 216 | QRE141J-182Y | C RESISTOR | 1.8K 5% 1/4W | |
| | R 217 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| ⚠ | R 218 | QRZ9015-221X | F.RESISTOR | 220 1/0W | |
| ⚠ | R 219 | QRZ9015-221X | F.RESISTOR | 220 1/0W | |
| | R 220 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 221 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 222 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 223 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 224 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 225 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 226 | QRK126J-4R7X | C RESISTOR | 4.7 5% 1/2W | |
| | R 227 | QRE141J-4R7Y | C RESISTOR | 4.7 5% 1/4W | |
| | R 230 | QRE141J-471Y | C RESISTOR | 470 5% 1/4W | |
| | R 231 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 235 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 236 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 237 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 238 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 239 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 240 | QRE141J-823Y | C RESISTOR | 82K 5% 1/4W | |
| | R 241 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 242 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 243 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 244 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 245 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 246 | QRE141J-823Y | C RESISTOR | 82K 5% 1/4W | |
| | R 247 | QRE141J-394Y | C RESISTOR | 390K 5% 1/4W | |
| | R 248 | QRE141J-334Y | C RESISTOR | 330K 5% 1/4W | |
| | R 249 | QRE141J-475Y | C RESISTOR | 4.7M 5% 1/4W | |

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 250 | QRE141J-475Y | C RESISTOR | 4.7M 5% 1/4W | |
| | R 251 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 252 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 253 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 254 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 255 | QRE141J-100Y | C RESISTOR | 10 5% 1/4W | |
| | R 256 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 257 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 258 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 259 | QRE141J-104Y | C RESISTOR | 100K 5% 1/4W | |
| | R 260 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 261 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 262 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 263 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 264 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 265 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 266 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 267 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 268 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 269 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 270 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 271 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 272 | QRE141J-472Y | C RESISTOR | 4.7K 5% 1/4W | |
| | R 273 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 274 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 275 | QRE141J-221Y | C RESISTOR | 220 5% 1/4W | |
| | R 276 | QRE141J-223Y | C RESISTOR | 22K 5% 1/4W | |
| | R 277 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 300 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 301 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 302 | QRE141J-182Y | C RESISTOR | 1.8K 5% 1/4W | |
| ⚠ | R 303 | QRZ9015-101X | F.RESISTOR | 100 1/0W | |
| | R 304 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 305 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 306 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 307 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 308 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 309 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 310 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 311 | QRK126J-4R7X | C RESISTOR | 4.7 5% 1/2W | |
| | R 312 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 313 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 314 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| ⚠ | R 315 | QRZ9015-101X | F.RESISTOR | 100 1/0W | |
| | R 316 | QRE141J-182Y | C RESISTOR | 1.8K 5% 1/4W | |
| | R 317 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 318 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 319 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 320 | QRK126J-4R7X | C RESISTOR | 4.7 5% 1/2W | |
| | R 321 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 322 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 323 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 324 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 325 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 326 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 327 | QRE141J-182Y | C RESISTOR | 1.8K 5% 1/4W | |
| ⚠ | R 328 | QRZ9015-101X | F.RESISTOR | 100 1/0W | |
| | R 329 | QRE141J-103Y | C RESISTOR | 10K 5% 1/4W | |
| | R 330 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 331 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 332 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 333 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 334 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |

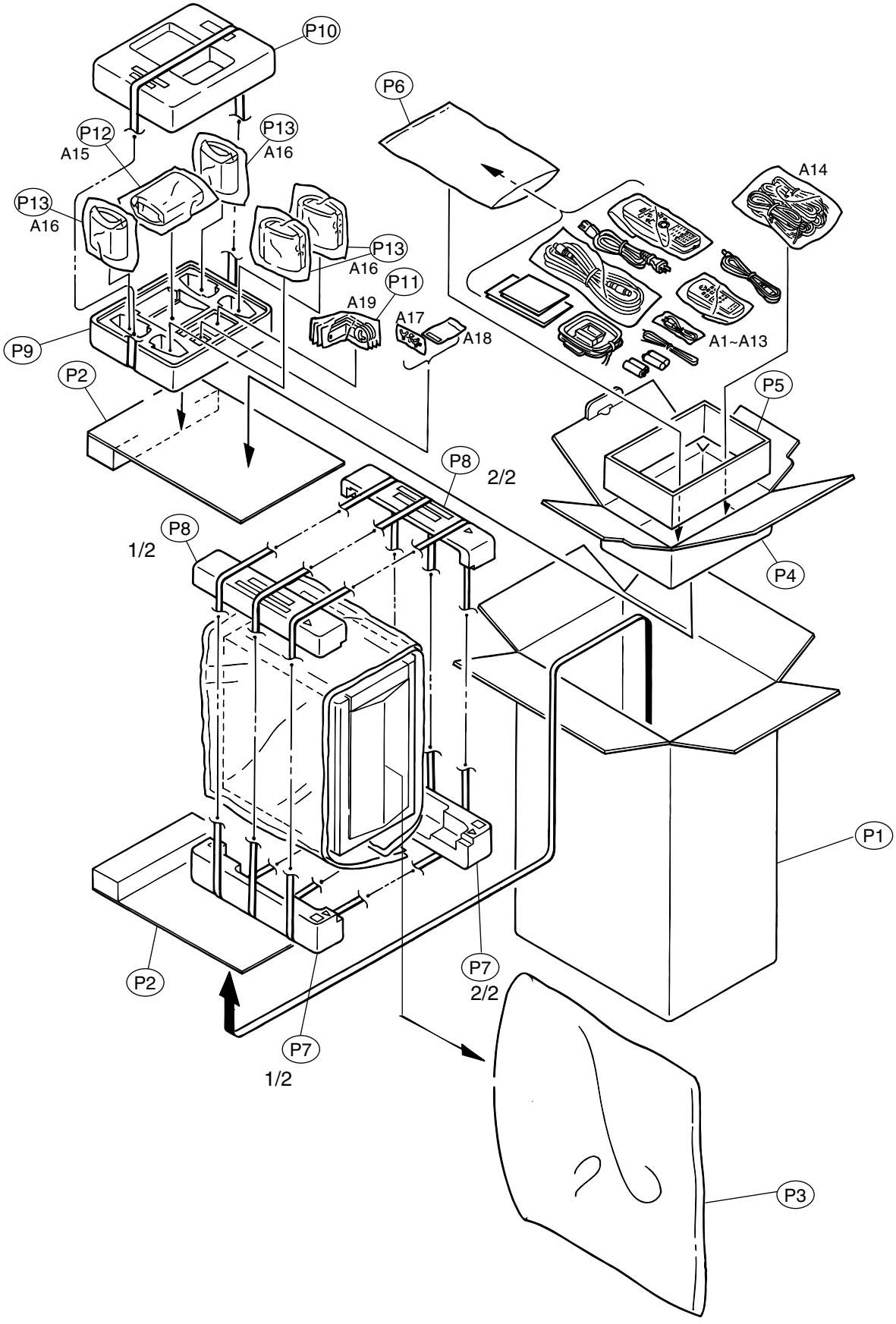
■ **Electrical parts list (Sub board)** **Block No. 08**

| ⚠ | Item | Parts number | Parts name | Remarks | Area |
|---|---|---|---|---|---|
| | R 335 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 336 | QRK126J-4R7X | C RESISTOR | 4.7 5% 1/2W | |
| | R 337 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 338 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 339 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| ⚠ | R 340 | QRZ9015-101X | F.RESISTOR | 100 1/0W | |
| | R 341 | QRE141J-182Y | C RESISTOR | 1.8K 5% 1/4W | |
| | R 342 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 343 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 344 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 345 | QRK126J-4R7X | C RESISTOR | 4.7 5% 1/2W | |
| | R 346 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 347 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 348 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 349 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 350 | QRE141J-332Y | C RESISTOR | 3.3K 5% 1/4W | |
| | R 351 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 352 | QRE141J-182Y | C RESISTOR | 1.8K 5% 1/4W | |
| | R 353 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 354 | QRT012J-R22 | UNF.MF.RESISTOR | 5% 1/1W | |
| | R 355 | QRE141J-563Y | C RESISTOR | 56K 5% 1/4W | |
| | R 356 | QRE141J-102Y | C RESISTOR | 1.0K 5% 1/4W | |
| | R 357 | QRE141J-183Y | C RESISTOR | 18K 5% 1/4W | |
| | R 358 | QRE141J-473Y | C RESISTOR | 47K 5% 1/4W | |
| | R 359 | QRK126J-4R7X | C RESISTOR | 4.7 5% 1/2W | |
| | R 360 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 370 | QRE141J-152Y | C RESISTOR | 1.5K 5% 1/4W | |
| | R 371 | QRE141J-152Y | C RESISTOR | 1.5K 5% 1/4W | |
| | R 372 | QRE141J-162Y | C RESISTOR | 1.6K 5% 1/4W | |
| | R 373 | QRE141J-152Y | C RESISTOR | 1.5K 5% 1/4W | |
| | R 374 | QRE141J-162Y | C RESISTOR | 1.6K 5% 1/4W | |
| | R 375 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 376 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 377 | QRE141J-562Y | C RESISTOR | 5.6K 5% 1/4W | |
| | R 378 | QRE141J-222Y | C RESISTOR | 2.2K 5% 1/4W | |
| | R 379 | QRE141J-562Y | C RESISTOR | 5.6K 5% 1/4W | |
| | R 400 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 401 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 402 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 403 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| | R 404 | QRE141J-8R2Y | C RESISTOR | 8.2 5% 1/4W | |
| ⚠ | RY400 | QSK0055-001 | RELAY | | |
| | RY401 | QSK0095-001 | RELAY | | |
| | RY402 | QSK0095-001 | RELAY | | |
| | RY403 | QSK0095-001 | RELAY | | |
| | Z 400 | QNG0020-001Z | FUSE CLIP | | |
| | Z 401 | QNG0020-001Z | FUSE CLIP | | |

# — MEMO —

# Packing materials and accessories parts list

Block No. M 6 M M
Block No. M 7 M M



## ■ Parts list (Packing)

**Block No. M6MM**

| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | P 1 | LV32243-001A | CARTON | 1 | | |
| | P 2 | LV41665-001A | PROTECTOR | 2 | | |
| | P 3 | QPA10010005P | POLY BAG | 1 | FOR SPK | |
| | P 4 | LV31968-001A | ACC.BOX | 1 | | |
| | P 5 | LV31983-001A | CARTON SHEET | 1 | | |
| | P 6 | QPA02504507P | POLY BAG | 1 | FOR ACC | EE |
| | | QPA03004507P | POLY BAG | 1 | FOR ACC | B,E,EN |
| | P 7 | 8000042211 | BOTTOM CUSHION | 1 | | |
| | P 8 | 8000042201 | TOP CUSHION | 1 | | |
| | P 9 | 8000042111 | BOTTOM CUSHION | 1 | | |
| | P 10 | 8000042101 | TOP CUSHION | 1 | | |
| | P 11 | 8500035701 | POLY BAG | 4 | FOR BKT | |
| | P 12 | 8500032771 | POLY BAG | 1 | FOR SPK BOX | |
| | P 13 | 8500032761 | POLY BAG | 4 | FOR SPK BOX | |

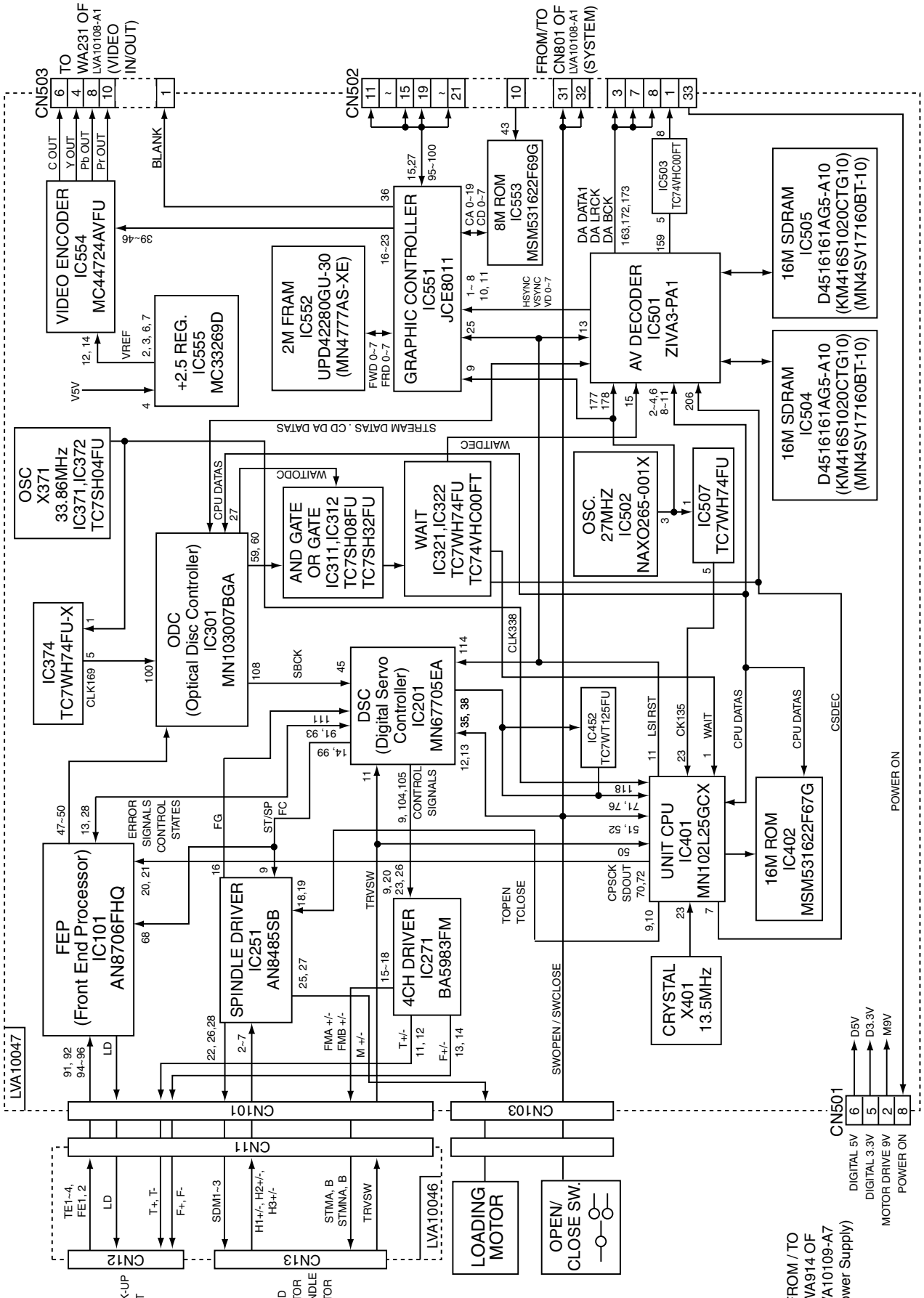
## ■ Parts list (Accessories)

**Block No. M7MM**

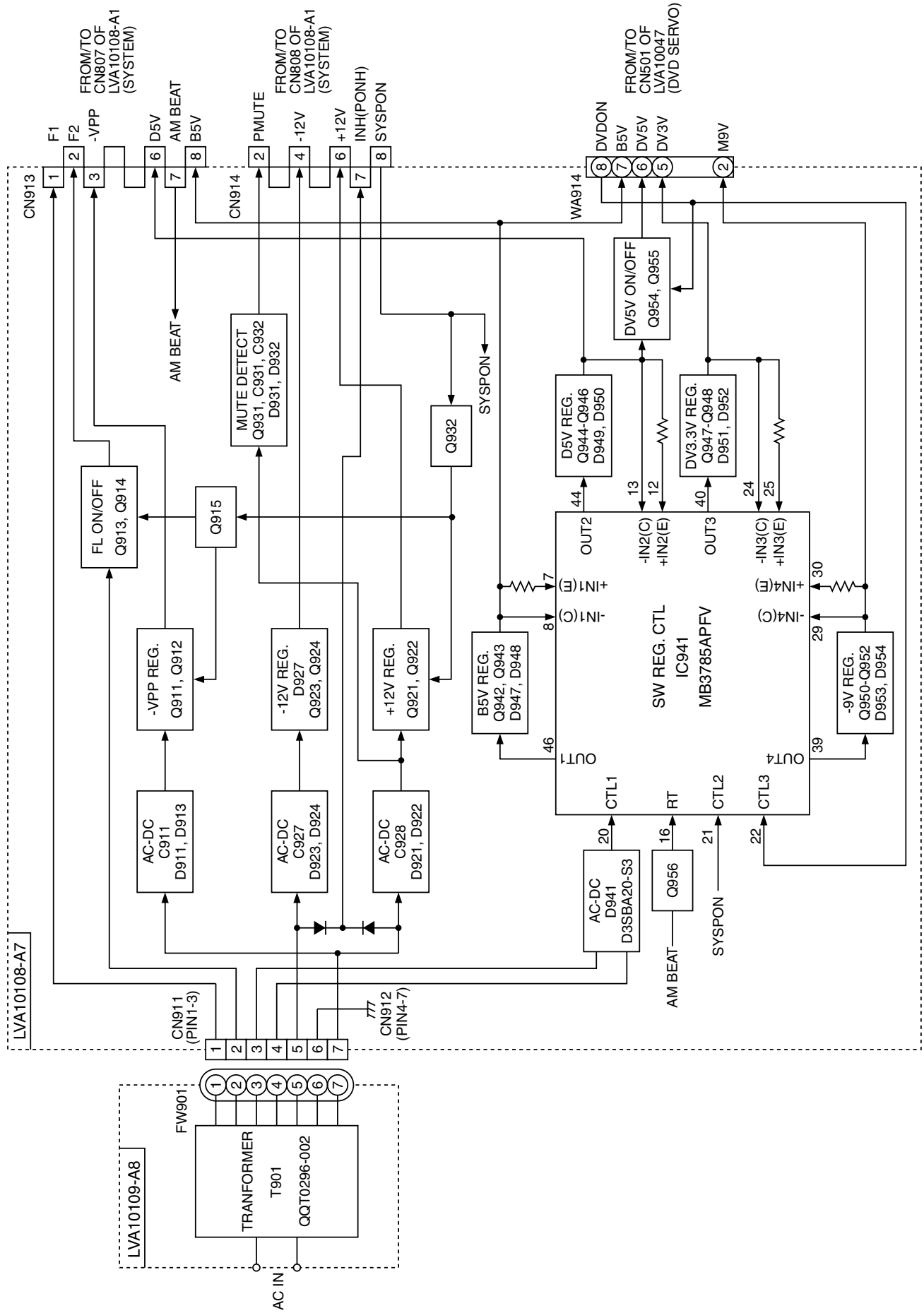
| ⚠ | Item | Parts number | Parts name | Q'ty | Description | Area |
|---|---|---|---|---|---|---|
| | A 1 | LVT0516-003A | INST.BOOK | 1 | DAN | EN |
| | | LVT0516-001A | INST.BOOK | 1 | ENG | B |
| | | LVT0517-001A | INST.BOOK-2 | 1 | ENG | B |
| | | LVT0517-002A | INST.BOOK-2 | 1 | SPA | E |
| | | LVT0517-004A | INST.BOOK-2 | 1 | RUS | EE |
| | | LVT0516-002A | INST.BOOK | 1 | ENG,GER,FRE,DUT | E |
| | | LVT0517-003A | INST.BOOK-2 | 1 | SWE | EN |
| | | LVT0516-002A | INST.BOOK | 1 | SPA,ITA | E |
| | | LVT0516-003A | INST.BOOK | 1 | GER,FRE,SWE,FIN | EN |
| | | LVT0517-007A | INST.BOOK-2 | 1 | ITA | E |
| | | LVT0517-008A | INST.BOOK-2 | 1 | FIN | EN |
| | | LVT0517-012A | INST.BOOK-2 | 1 | DUT | E,EN |
| | | LVT0517-011A | INST.BOOK-2 | 1 | FRE | E,EN |
| | | LVT0517-009A | INST.BOOK-2 | 1 | DEN | EN |
| | | LVT0517-010A | INST.BOOK-2 | 1 | GER | E,EN |
| | | LVT0516-004A | INST.BOOK | 1 | RUS | EE |
| | A 3 | E43486-340A | SAFETY SHEET | 1 | | B |
| | A 4 | VNA3000-202 | REGISTER CARD | 1 | | B |
| ⚠ | A 5 | QMP39F0-183E | POWER CORD | 1 | | E,EE,EN |
| ⚠ | | QMPP060-183-JD | POWER CORD | 1 | | B |
| | A 6 | QAM0239-002 | SYSTEM CABLE | 1 | | |
| | A 7 | RM-STHA10R | W.LESS REMOCON | 1 | | |
| | A 8 | RM-STHA10EC | W.LESS REMOCON | 1 | | |
| | A 9 | ---------- | BATTERY | 2 | | |
| | A 10 | QAM0236-001 | VIDEO CABLE | 1 | | |
| | A 11 | EWP805-001W | PLUG CORD ASSY | 1 | | |
| | A 12 | QAL0014-001 | LOOP ANTENNA | 1 | | |
| | A 13 | EWP503-001C | ANTENNA WIRE | 1 | | |
| | A 14 | LV41663-002A | SPK CORD ASSY | 1 | | |
| | A 15 | SP-XCA10J | SPEAKER BOX | 1 | | |
| | A 16 | SP-XSA10J | SPEAKER BOX | 4 | | |
| | A 17 | 7200035901 | BOLT | 4 | | |
| | A 18 | 8600005001 | FOOT | 1 | | |
| | A 19 | 6400017301 | SUB BRACKET | 4 | | |

# Block diagrams

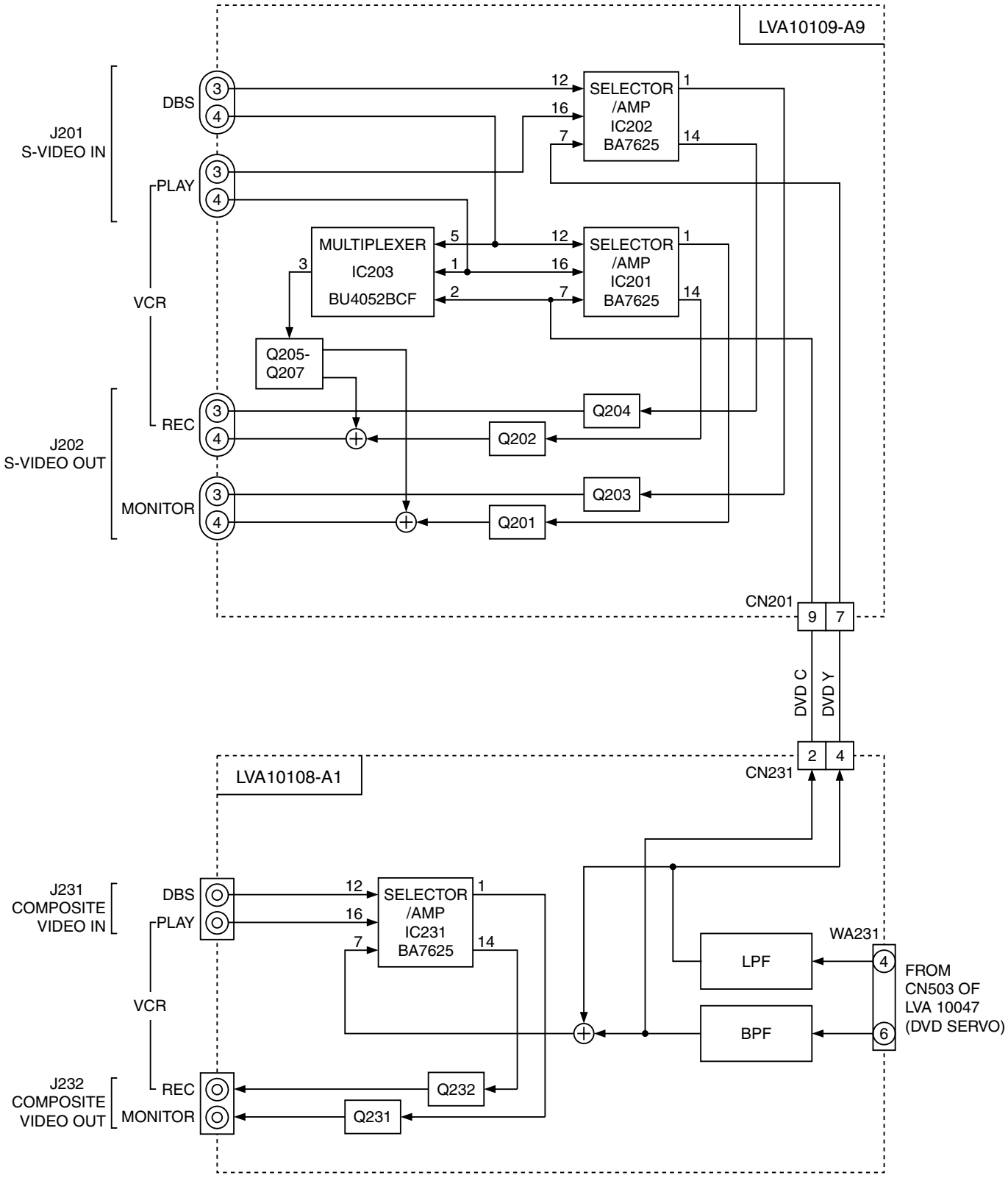
## ■ Block diagrams (DVD servo control Section)



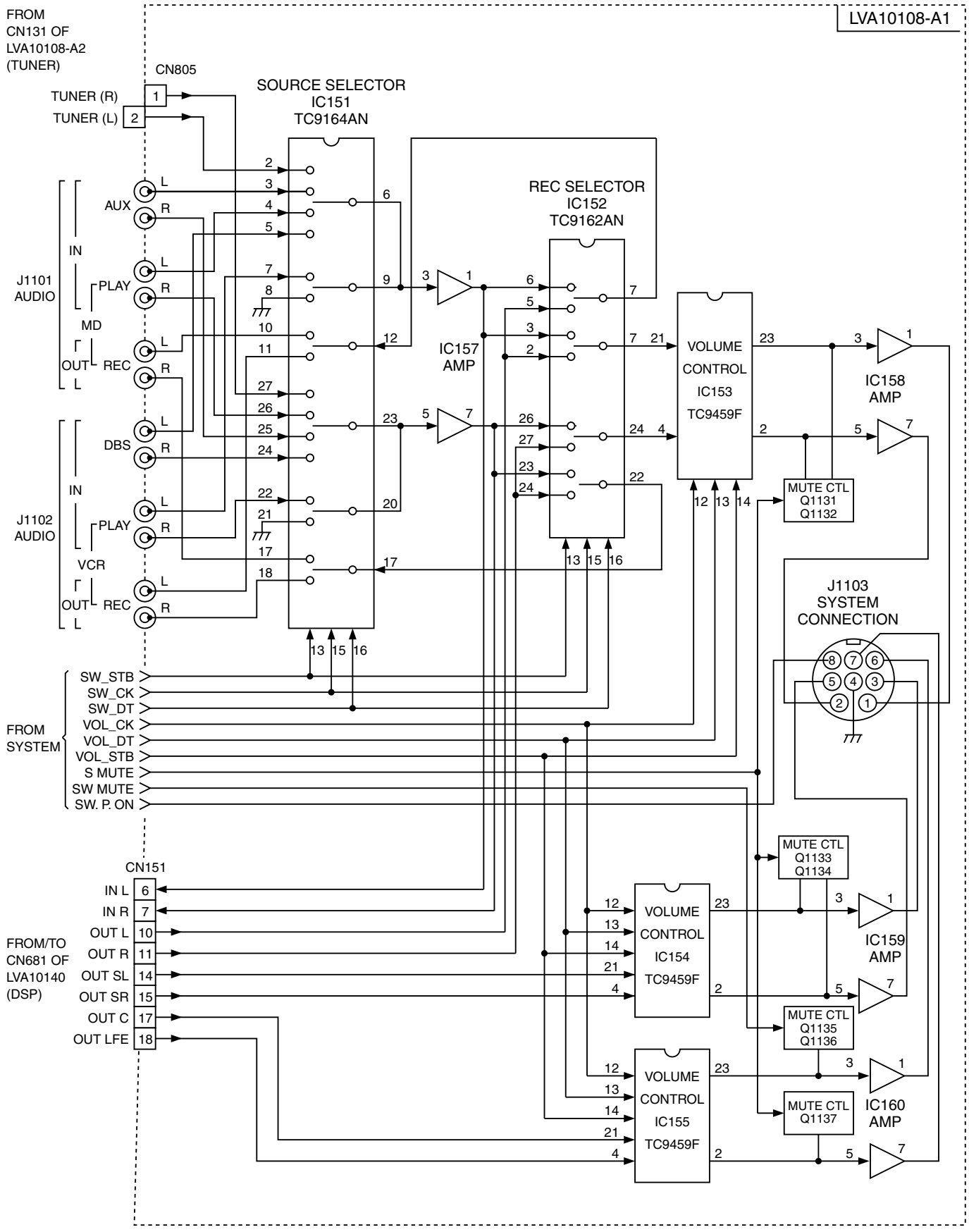
## ■ Block diagrams (Power supply Section)



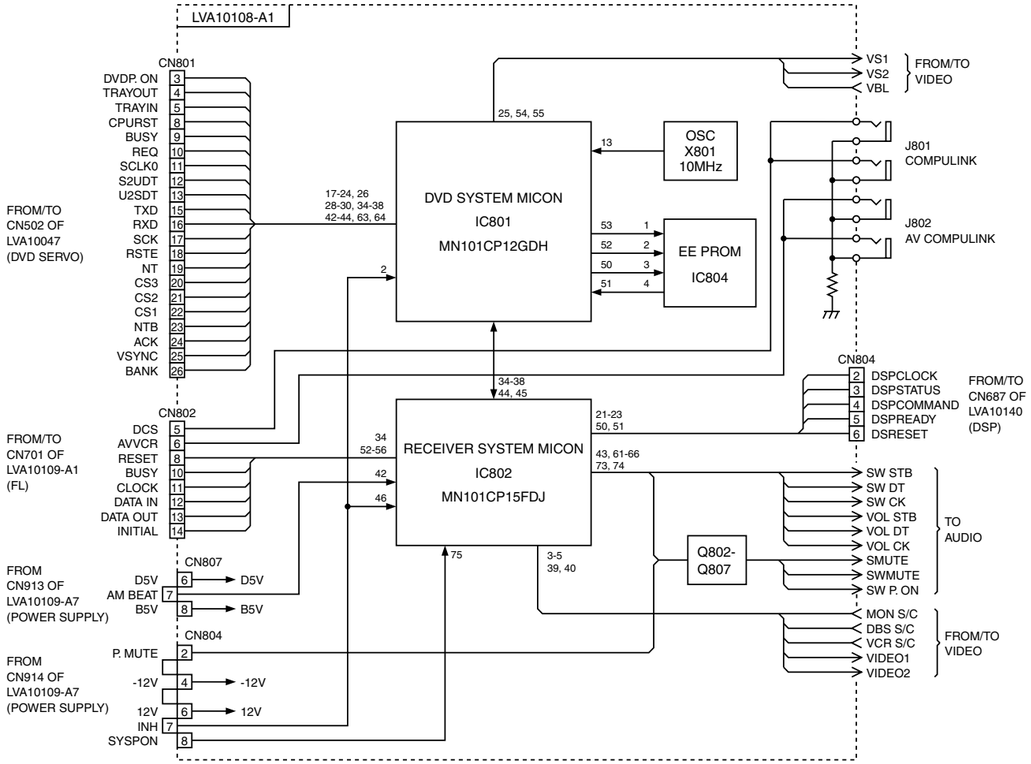
## ■ Block diagrams (Video out Section)



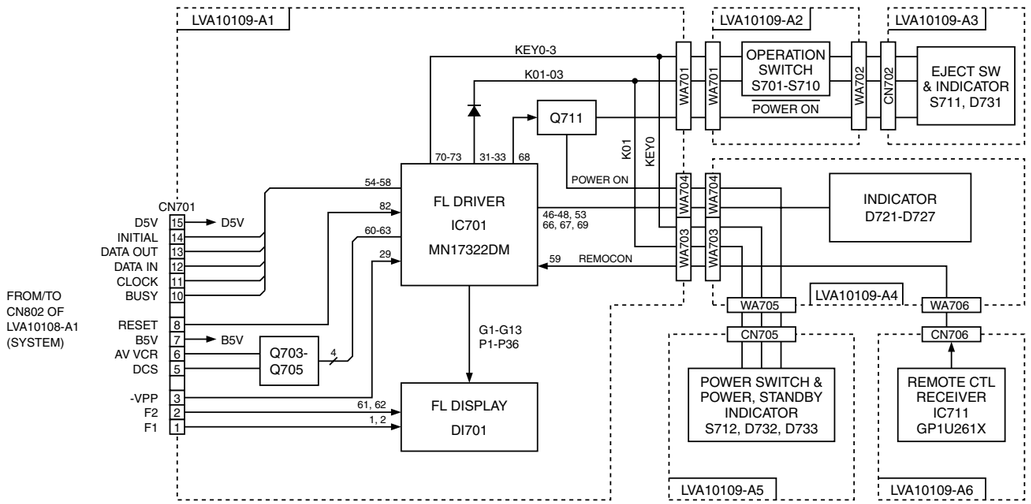
## ■ Block diagrams (Audio out section)



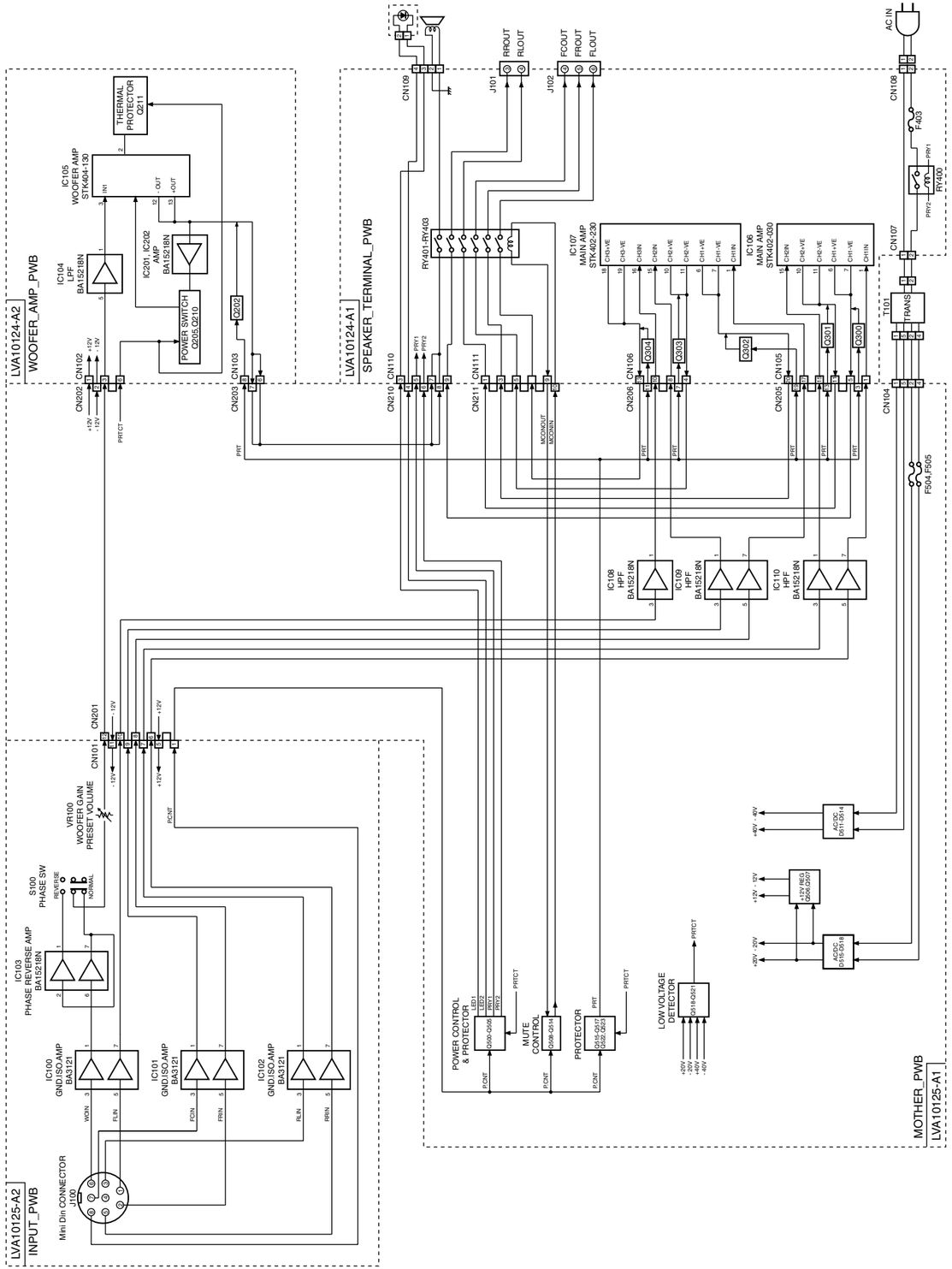
## ■ Block diagrams (System section)




## ■ Block diagrams (FL section)

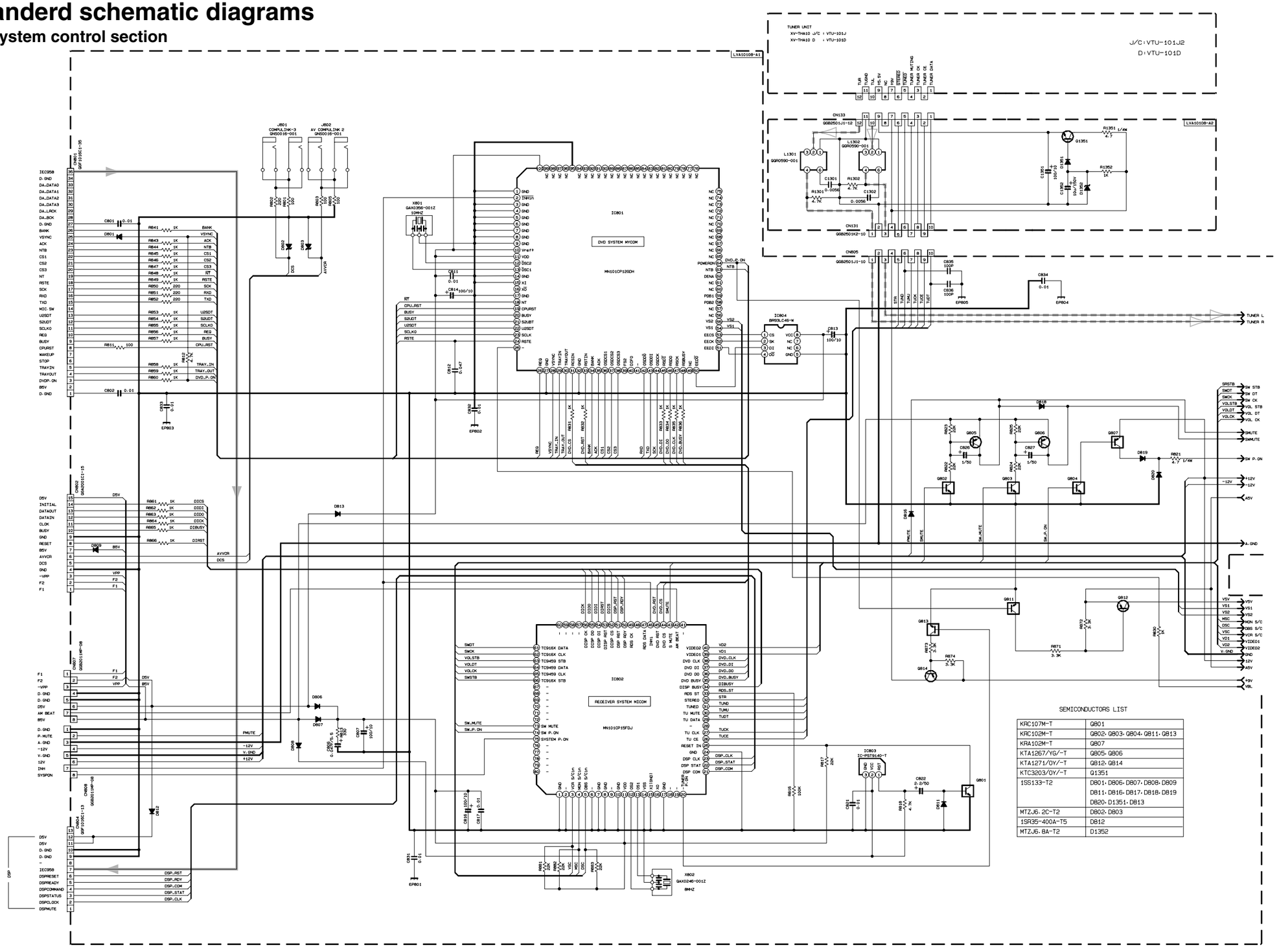



## ■ Block diagrams (SP-PW10 Powered subwoofer section)



# Standerd schematic diagrams

## ■ System control section

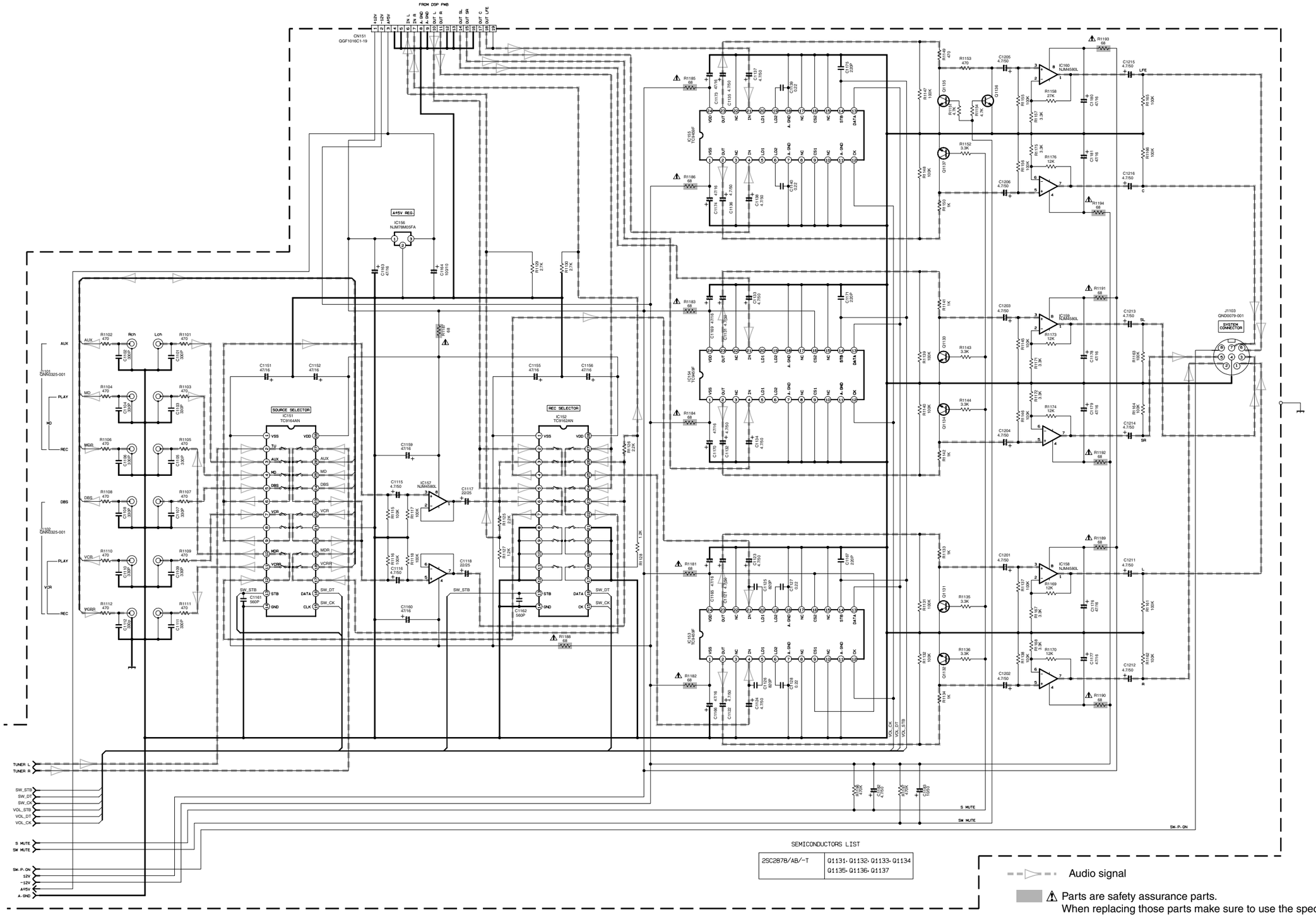



⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

Digital (Audio) signal

Audio signal

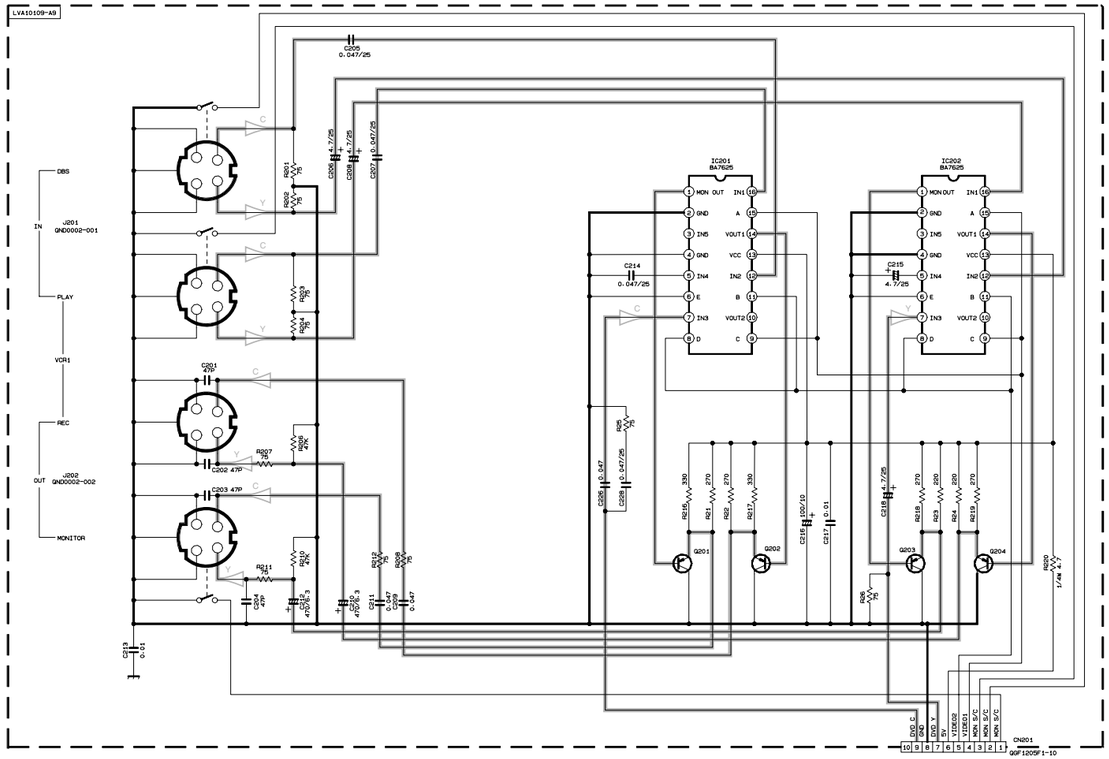
## ■ Audio input/output section

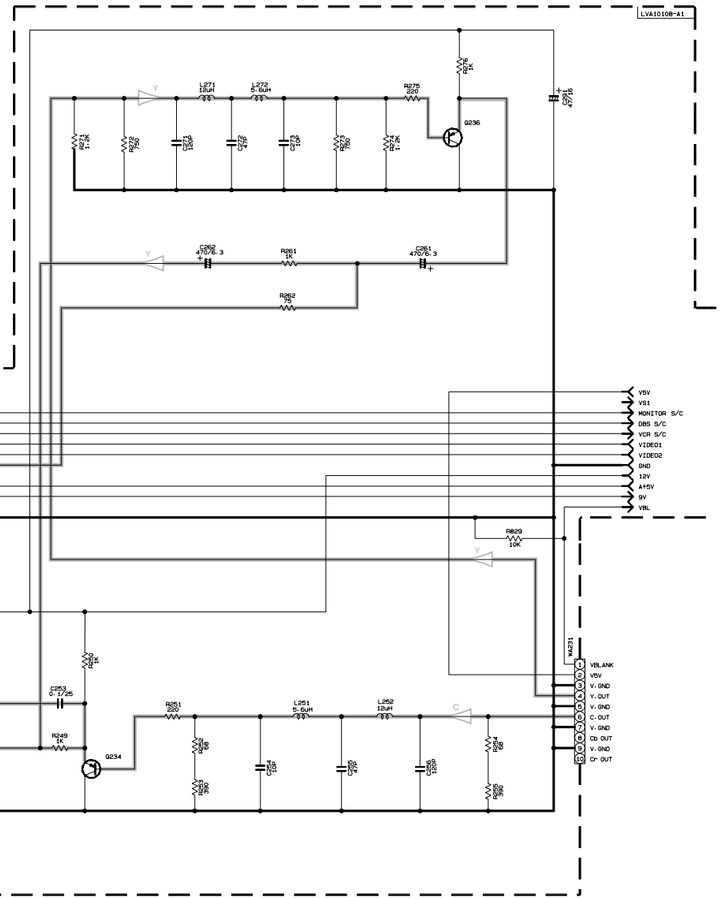



SEMICONDUCTORS LIST

| | |
|---|---|
| 2SC2878/AB/-T | Q1131, Q1132, Q1133, Q1134<br>Q1135, Q1136, Q1137 |

## ■ Video input/output section



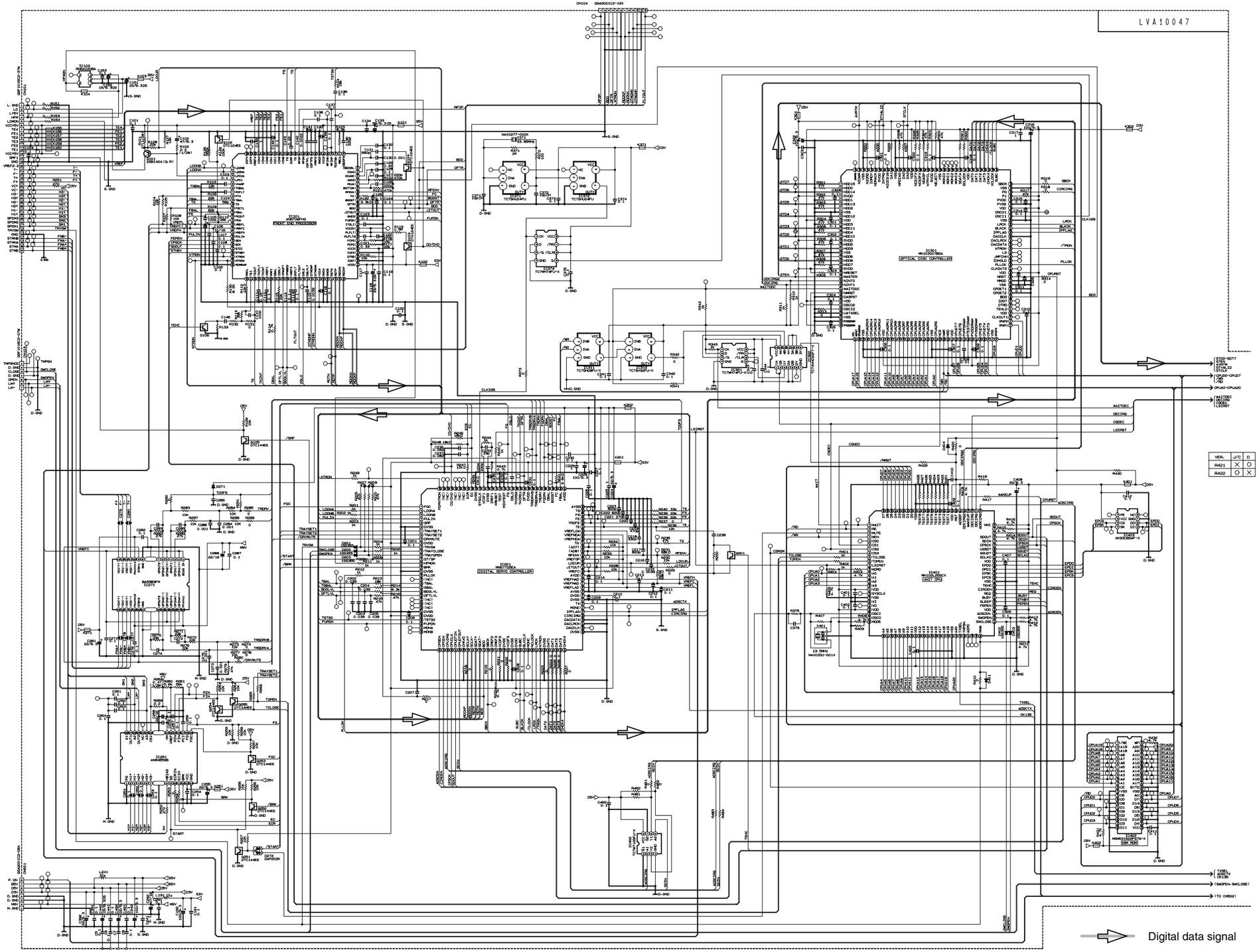

SEMICONDUCTORS LIST

| | |
|---|---|
| KRA1267/YG/-T | Q231, Q232, Q233, Q234, Q236 |
| 2SA1037AK/RS/-X | Q201, Q202, Q203, Q204 |

⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

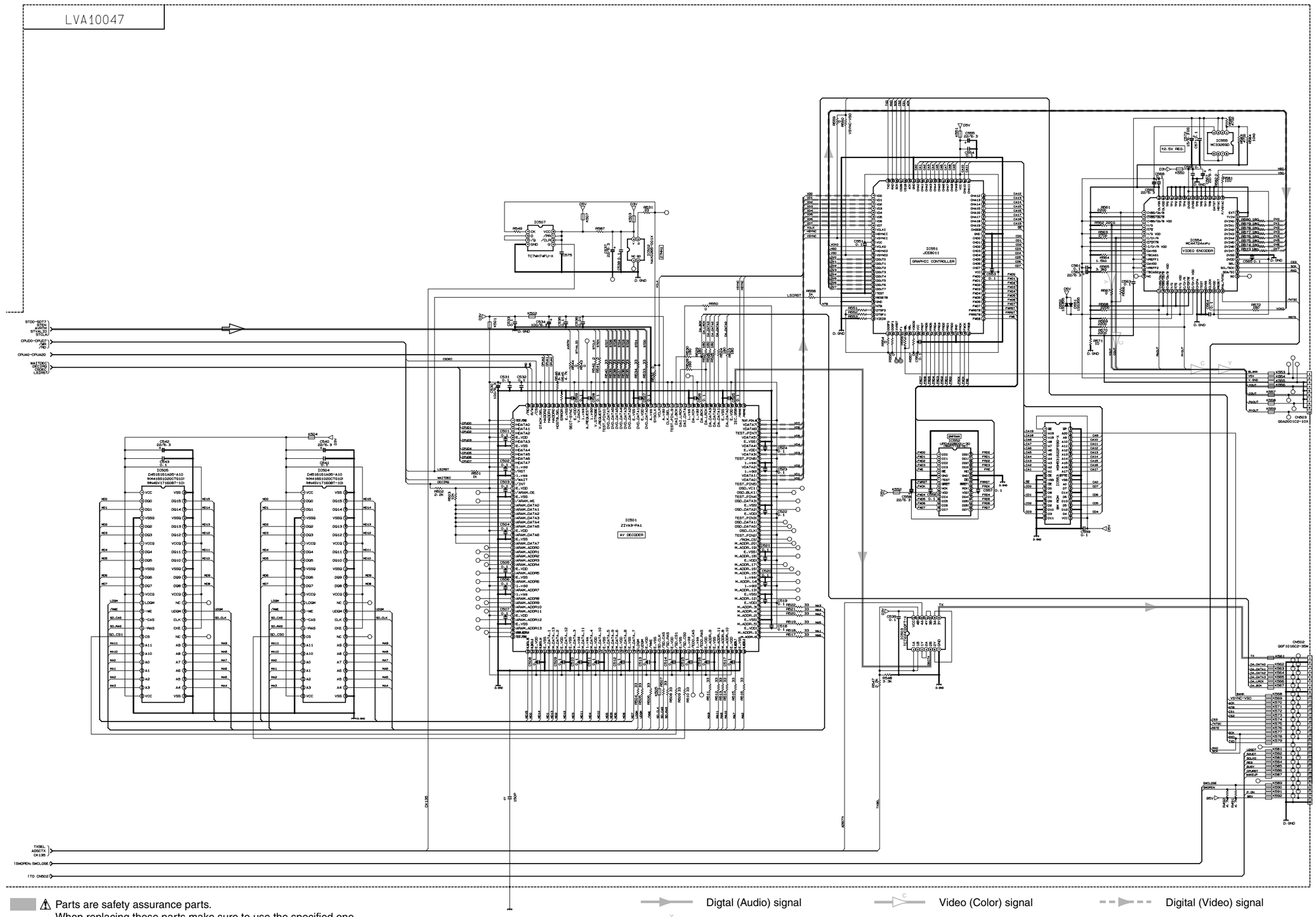
Video (Composite) signal　Video (Luminance) signal　Video (Color) signal

## ■ DVD Servo controlo section 1/2


LVA10047
FROM CN11 OF LVA10046 (SHEET 9/9)
FROM FLM-V3
TO CN6021
Digital data signal
⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

| VER. | µ/C | D |
|---|---|---|
| R421 | × | ○ |
| R422 | ○ | × |

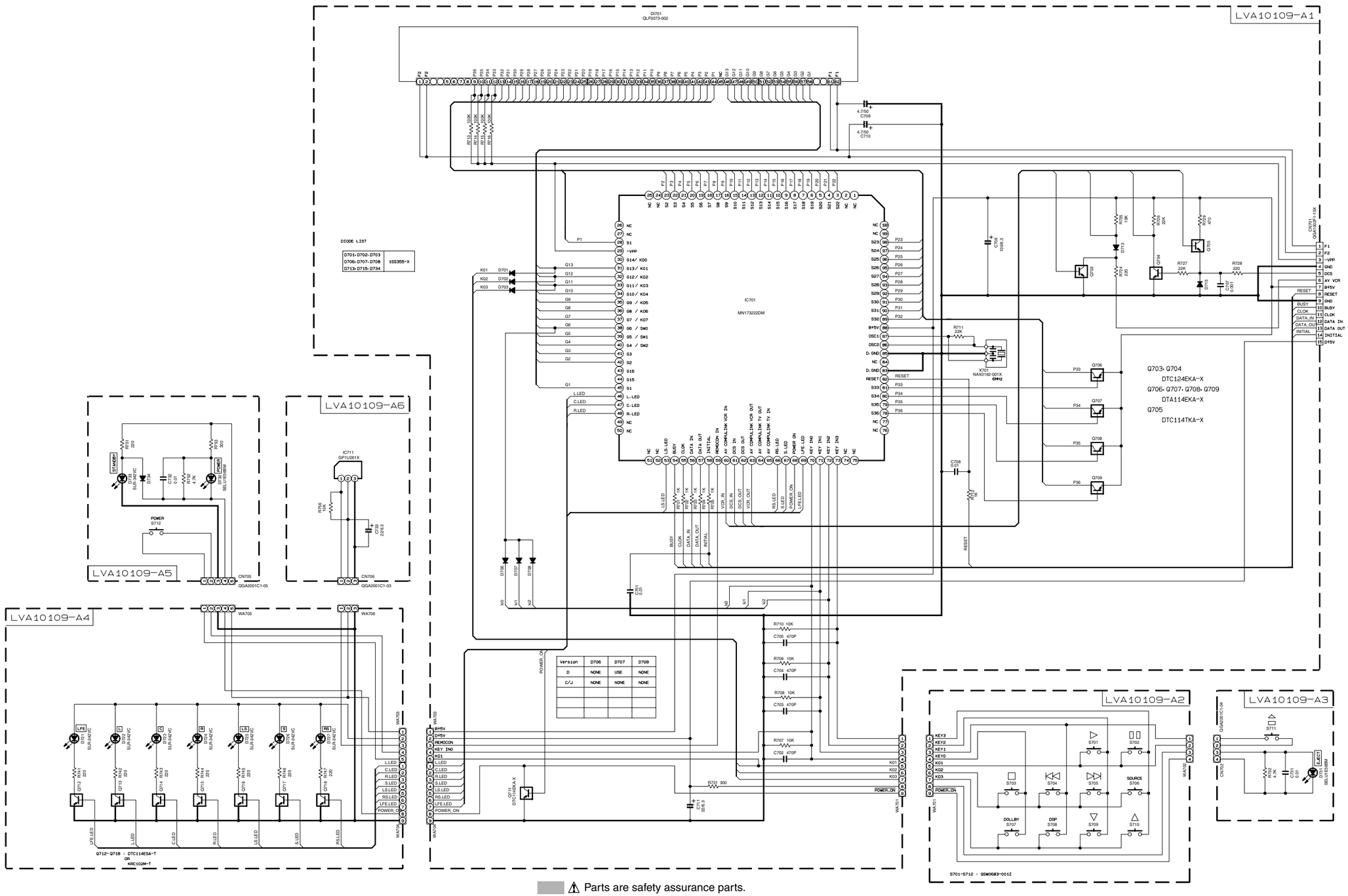
## ■ DVD Servo control section 2/2




⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

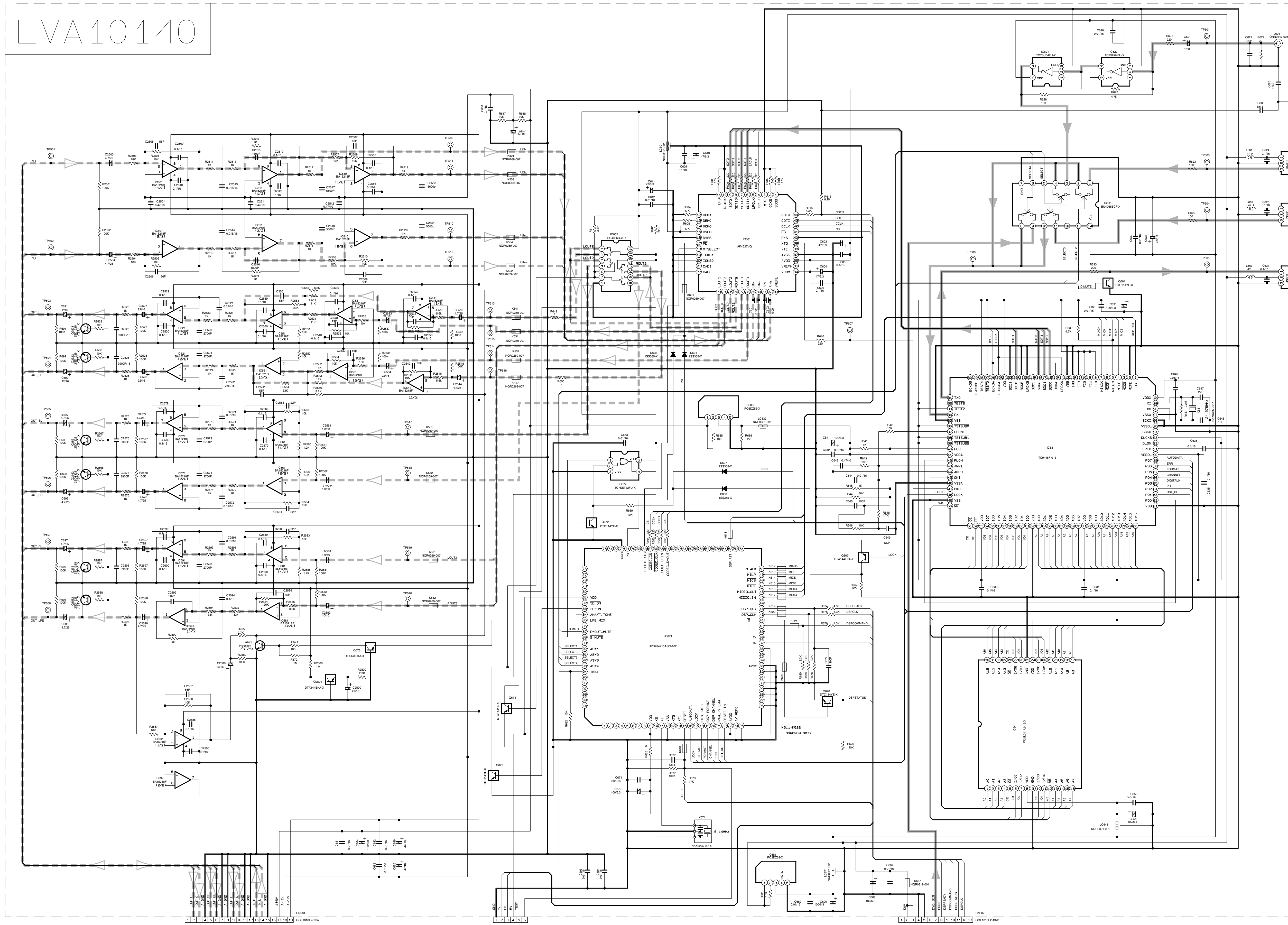
Digtal (Audio) signal
Video (Luminance) signal
Video (Color) signal
Digital data signal
Digital (Video) signal

## ■ Front circuit section




⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

## ■ DSP control section

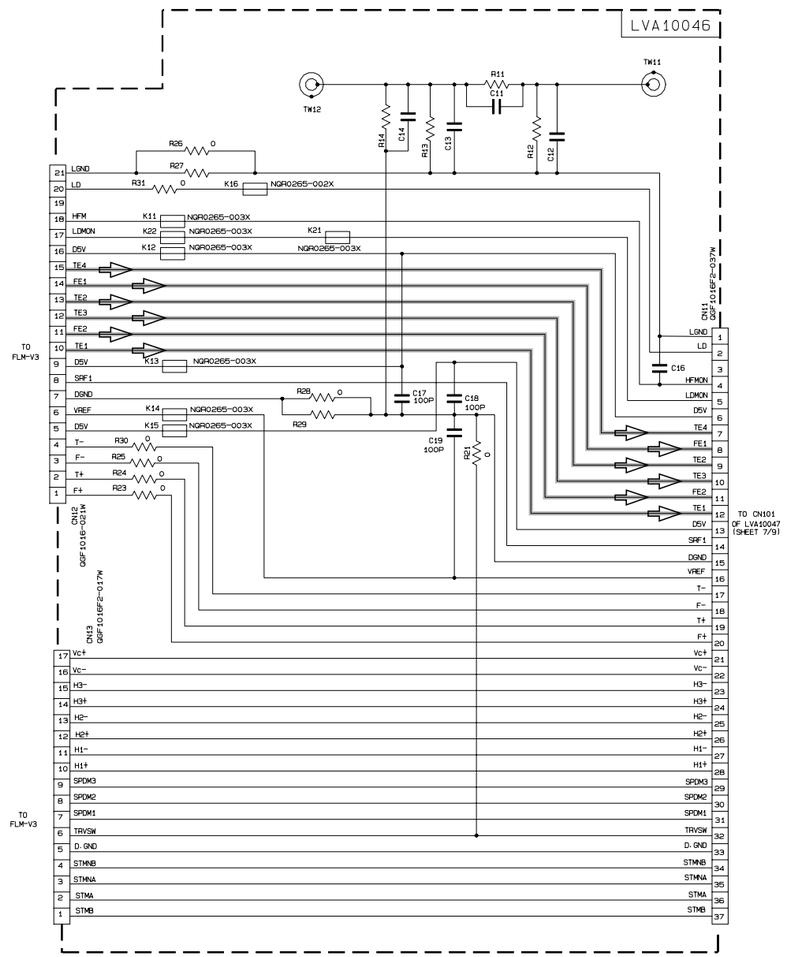

LVA10140
IN_L
IN_R
OUT_L
OUT_R
OUT_SL
OUT_SR
OUT_C
OUT_LFE
IC501 BA15218F
IC511 BA15218F
IC510 BA15218F
IC521 BA15218F
IC551 BA15218F
IC531 BA15218F
IC541 BA15218F
IC571 BA15218F
IC561 BA15218F
IC591 BA15218F
IC581 BA15218F
IC592 BA15218F
IC602 BU4066BCF-X
IC601 AK4527VQ
IC621 TC7SU04FU-X
IC622 TC7SU04FU-X
IC611 BU4066BCF-X
IC631 TC9446F-013
IC641 W24L011AJ-15-X
IC671 UPD784215AGC-102
IC672 TC7SET32FU-X
IC683 PQ3DZ53-X
IC681 PQ3DZ53-X
Q601 DTC114YE-X
Q607 DTA144EKA-X
Q670 DTC114YE-X
Q671 2SD1328 /ST/-X
Q672 DTC114YE-X
Q673 DTA144EKA-X
Q674 DTC114YE-X
Q675 DTC114YE-X
Q2501 DTA144EKA-X
D601 1SS355-X
D602 1SS355-X
D607 1SS355-X
D608 1SS355-X
X631 24.576MHz NAX0385-001X
X671 6.14MHz NAX0275-001X
K611~K622 NQR0269-007X
J601 ONN0347-001
AUX IN
UN661 GP1FA550RZ
MD IN
UN662 GP1FA550RZ
DBS IN
UN663 GP1FA550TZ
OPT OUT
CN681 QGF1016F2-19W
CN687 QGF1016F2-13W

Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

Digital (Audio) signal

Audio signal

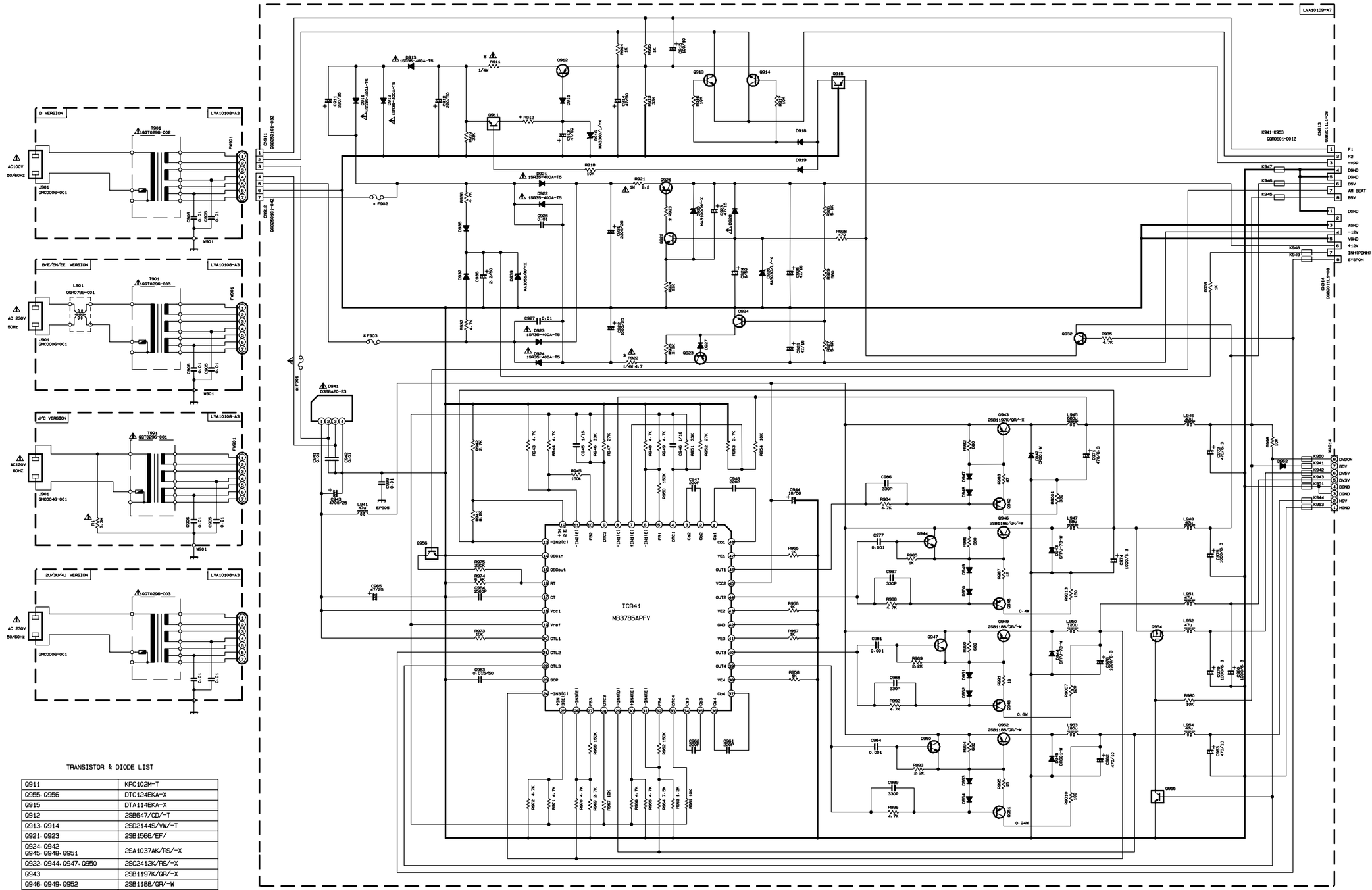
## ■ Connection circuit section




Digital data signal

⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

## ■ Power supply section




TRANSISTOR & DIODE LIST

| | |
|---|---|
| Q911 | KRC102M-T |
| Q955, Q956 | DTC124EKA-X |
| Q915 | DTA114EKA-X |
| Q912 | 2SB647/CD/-T |
| Q913, Q914 | 2SD2144S/VW/-T |
| Q921, Q923 | 2SB1566/EF/ |
| Q924, Q942<br>Q945, Q948, Q951 | 2SA1037AK/RS/-X |
| Q922, Q944, Q947, Q950 | 2SC2412K/RS/-X |
| Q943 | 2SB1197K/QR/-X |
| Q946, Q949, Q952 | 2SB1188/QR/-W |
| D915, D918, D919, D927<br>D936, D937, D947<br>D948, D949, D950, D951, D952<br>D953, D954, D962 | 1SS355-X |
| Q954 | SI2305DS-X |
| D928 | 1SS388-X |

*

| VERSION | R922 | F902, F903 | F901 | R923 | R911 | R912 |
|---|---|---|---|---|---|---|
| D, C, J | UNF RESISTOR | BUS WIRE | 2A/125V | 680 | 4.7 UNF RESISTOR | 1K |
| B, E, EN, EE, 2U, 3U, 4U | FUSIBLE RESISTOR | T500mA | T2A | 330 | 68 FUSIBLE RESISTOR | 2.2K |

## ■ Voltage value section

IC101

| NO | DC(V) | NO | DC(V) |
|---|---|---|---|
| 1 | 0V | 51 | 3.2V |
| 2 | 0V | 52 | 1.3V |
| 3 | 4.4V | 53 | 4.9V |
| 4 | 0V | 54 | 0V |
| 5 | 1.6V | 55 | 4.9V |
| 6 | 1.6V | 56 | 0.5V |
| 7 | 1.8V | 57 | 1.2V |
| 8 | 2.1V | 58 | 2.2V |
| 9 | 1.6V | 59 | 2.2V |
| 10 | 1.4V | 60 | 2.2V |
| 11 | 0.8V | 61 | 1.5V |
| 12 | 1.4V | 62 | 1.6V |
| 13 | 1.4V | 63 | 0V |
| 14 | 1.4V | 64 | 1.4V |
| 15 | 0.6V | 65 | 0.2V |
| 16 | 1.4V | 66 | 0.2V |
| 17 | 2.1V | 67 | 1.5V |
| 18 | 4.6V | 68 | 1.4V |
| 19 | 5.0V | 69 | 1.3V |
| 20 | 4.9V | 70 | 2.2V |
| 21 | 4.9V | 71 | 2.1V |
| 22 | 4.9V | 72 | 1.0V |
| 23 | 3.2V | 73 | 2.2V |
| 24 | 4.9V | 74 | 2.9V |
| 25 | 0V | 75 | 3.4V |
| 26 | 1.2V | 76 | 3.4V |
| 27 | 1.4V | 77 | 1.1V |
| 28 | 1.4V | 78 | 2.1V |
| 29 | 1.4V | 79 | 2.1V |
| 30 | 0V | 80 | 2.1V |
| 31 | 2.1V | 81 | 4.9V |
| 32 | 0V | 82 | 0V |
| 33 | 1.4V | 83 | 2.1V |
| 34 | 1.2V | 84 | 3.3V |
| 35 | 1.5V | 85 | 3.3V |
| 36 | 1.6V | 86 | 2.0V |
| 37 | 1.9V | 87 | 2.1V |
| 38 | 2.1V | 88 | 1.4V |
| 39 | 3.9V | 89 | 2.2V |
| 40 | 3.8V | 90 | 1.4V |
| 41 | 2.1V | 91 | 2.0V |
| 42 | 2.3V | 92 | 2.1V |
| 43 | 2.3V | 93 | 4.9V |
| 44 | 4.9V | 94 | 2.1V |
| 45 | 0V | 95 | 2.1V |
| 46 | 0V | 96 | 2.1V |
| 47 | 1.6V | 97 | 2.1V |
| 48 | 1.6V | 98 | 2.1V |
| 49 | 1.6V | 99 | 2.1V |
| 50 | 1.6V | 100 | 2.1V |

IC102

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 5.0V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |

IC201

| NO | DC(V) | NO | DC(V) | NO | DC(V) |
|---|---|---|---|---|---|
| 1 | 3.2V | 51 | 0V | 101 | 1.4V |
| 2 | 0V | 52 | 3.2V | 102 | 1.4V |
| 3 | 0V | 53 | 3.2V | 103 | 1.4V |
| 4 | 0V | 54 | 0V | 104 | 1.3V |
| 5 | 0V | 55 | 1.5V | 105 | 1.2V |
| 6 | 0V | 56 | 0V | 106 | 3.2V |
| 7 | 3.2V | 57 | 3.2V | 107 | 0.2V |
| 8 | 3.2V | 58 | 3.2V | 108 | 0.1V |
| 9 | 3.2V | 59 | 0V | 109 | 0.2V |
| 10 | 3.2V | 60 | 1.4V | 110 | 1.6V |
| 11 | 3.2V | 61 | 1.6V | 111 | 2.7V |
| 12 | 4.2V | 62 | 1.6V | 112 | 0V |
| 13 | 3.2V | 63 | 1.6V | 113 | 0V |
| 14 | 3.2V | 64 | 1.5V | 114 | 4.9V |
| 15 | 0V | 65 | 0V | 115 | 2.4V |
| 16 | 3.2V | 66 | 0V | 116 | 0V |
| 17 | 0V | 67 | 0V | 117 | 1.2V |
| 18 | 0V | 68 | 0V | 118 | 1.6V |
| 19 | 1.6V | 69 | 3.2V | 119 | 0V |
| 20 | 1.6V | 70 | 0V | 120 | 1.6V |
| 21 | 1.6V | 71 | 1.4V | 121 | 1.6V |
| 22 | 2.0V | 72 | 3.2V | 122 | 0V |
| 23 | 1.6V | 73 | 0V | 123 | 0V |
| 24 | 1.6V | 74 | 3.2V | 124 | 0V |
| 25 | 1.6V | 75 | 0V | 125 | 0V |
| 26 | 1.6V | 76 | 0.6V | 126 | 0V |
| 27 | 0V | 77 | 1.4V | 127 | 0V |
| 28 | 3.2V | 78 | 2.1V | 128 | 3.2V |
| 29 | 0V | 79 | 3.2V | | |
| 30 | 1.6V | 80 | 1.4V | | |
| 31 | ___ | 81 | 1.5V | | |
| 32 | ___ | 82 | 1.8V | | |
| 33 | 5.0V | 83 | 1.4V | | |
| 34 | 5.0V | 84 | 1.4V | | |
| 35 | 3.2V | 85 | 1.4V | | |
| 36 | 5.0V | 86 | 1.4V | | |
| 37 | 5.0V | 87 | 1.4V | | |
| 38 | 0V | 88 | 2.1V | | |
| 39 | 0V | 89 | 1.4V | | |
| 40 | 1.6V | 90 | 0.6V | | |
| 41 | 1.6V | 91 | 1.4V | | |
| 42 | 1.6V | 92 | 1.4V | | |
| 43 | 1.6V | 93 | 1.4V | | |
| 44 | 0.2V | 94 | 1.4V | | |
| 45 | 0V | 95 | 1.4V | | |
| 46 | 0V | 96 | 0V | | |
| 47 | 3.2V | 97 | 3.2V | | |
| 48 | 0V | 98 | 1.4V | | |
| 49 | 0V | 99 | 1.7V | | |
| 50 | 0V | 100 | 1.6V | | |

IC251

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 5.0V |
| 3 | 5.0V |
| 4 | 5.0V |
| 5 | 5.0V |
| 6 | 5.0V |
| 7 | 5.0V |
| 8 | 5.0V |
| 9 | 0V |
| 10 | 2.2V |
| 11 | 2.2V |
| 12 | 0V |
| 13 | 5.0V |
| 14 | 0V |
| 15 | 0V |
| 16 | 2.7V |
| 17 | 1.4V |
| 18 | 5.0V |
| 19 | 5.8V |
| 20 | 8.5V |
| 21 | 9.3V |
| 22 | 9.3V |
| 23 | 0V |
| 24 | 0V |
| 25 | 0V |
| 26 | 0V |
| 27 | 0V |
| 28 | 0V |

IC271

| NO | DC(V) |
|---|---|
| 1 | 1.4V |
| 2 | 1.4V |
| 3 | 1.4V |
| 4 | 1.4V |
| 5 | 1.4V |
| 6 | 1.4V |
| 7 | 1.4V |
| 8 | 0V |
| 9 | 3.2V |
| 10 | 5.0V |
| 11 | 2.5V |
| 12 | 2.5V |
| 13 | 2.5V |
| 14 | 2.5V |
| 15 | ___ |
| 16 | ___ |
| 17 | ___ |
| 18 | ___ |
| 19 | 10.3V |
| 20 | ___ |
| 21 | 0V |
| 22 | ___ |
| 23 | ___ |
| 24 | ___ |
| 25 | ___ |
| 26 | ___ |
| 27 | ___ |
| 28 | 10.3V |

IC301

| NO | DC(V) | NO | DC(V) | NO | DC(V) |
|---|---|---|---|---|---|
| 1 | 5.0V | 51 | 3.7V | 101 | 1.6V |
| 2 | 0V | 52 | 3.6V | 102 | 3.2V |
| 3 | 5.0V | 53 | 4.1V | 103 | 0V |
| 4 | 5.0V | 54 | 1.2V | 104 | 3.2V |
| 5 | 0V | 55 | 3.5V | 105 | 3.2V |
| 6 | 5.0V | 56 | 0V | 106 | 3.2V |
| 7 | 5.0V | 57 | 0.4V | 107 | 0V |
| 8 | 0V | 58 | 5.0V | 108 | 0V |
| 9 | 5.0V | 59 | 5.0V | 109 | 3.2V |
| 10 | 3.2V | 60 | 4.6V | 110 | 0V |
| 11 | 5.0V | 61 | 3.2V | 111 | 1.5V |
| 12 | 5.0V | 62 | 2.7V | 112 | 1.4V |
| 13 | 5.0V | 63 | 3.5V | 113 | 1.7V |
| 14 | 5.0V | 64 | 4.0V | 114 | 1.7V |
| 15 | 5.0V | 65 | 0V | 115 | 1.4V |
| 16 | 5.0V | 66 | 3.2V | 116 | 3.2V |
| 17 | 5.0V | 67 | 0V | 117 | 3.2V |
| 18 | 0V | 68 | 1.9V | 118 | 3.2V |
| 19 | 0V | 69 | 1.8V | 119 | 0V |
| 20 | 5.0V | 70 | 1.4V | 120 | 0V |
| 21 | 0V | 71 | 0V | 121 | 0V |
| 22 | 5.0V | 72 | 2.0V | 122 | 0V |
| 23 | 5.0V | 73 | 1.1V | 123 | 0V |
| 24 | 0V | 74 | 0.9V | 124 | 4.9V |
| 25 | 5.0V | 75 | 1.6V | 125 | 5.0V |
| 26 | 5.0V | 76 | 3.2V | 126 | 5.0V |
| 27 | 5.0V | 77 | 0V | 127 | 0V |
| 28 | 0V | 78 | 3.2V | 128 | 5.0V |
| 29 | 0V | 79 | 0V | 129 | 5.0V |
| 30 | 3.2V | 80 | 0.2V | 130 | 3.2V |
| 31 | 3.2V | 81 | 0V | 131 | 2.5V |
| 32 | 0V | 82 | 0V | 132 | 5.0V |
| 33 | 0V | 83 | 0V | 133 | 0V |
| 34 | 0V | 84 | 0V | 134 | 0V |
| 35 | 0V | 85 | 4.9V | 135 | 5.0V |
| 36 | 3.2V | 86 | 3.2V | 136 | 0V |
| 37 | 0.1V | 87 | 0V | 137 | 0V |
| 38 | 0.1V | 88 | 0V | 138 | 5.0V |
| 39 | 0V | 89 | 0V | 139 | 5.0V |
| 40 | 4.5V | 90 | 0V | 140 | 0V |
| 41 | 4.6V | 91 | 0V | 141 | 2.8V |
| 42 | 4.7V | 92 | 3.2V | 142 | 0V |
| 43 | 1.5V | 93 | 0V | 143 | 5.0V |
| 44 | 3.2V | 94 | 3.2V | 144 | 0V |
| 45 | 3.9V | 95 | 0V | | |
| 46 | 4.0V | 96 | 3.2V | | |
| 47 | 0.7V | 97 | 0V | | |
| 48 | 3.8V | 98 | 3.2V | | |
| 49 | 1.1V | 99 | 0V | | |
| 50 | 4.5V | 100 | 1.6V | | |

IC311

| NO | DC(V) |
|---|---|
| 1 | 5.0V |
| 2 | 4.6V |
| 3 | 0V |
| 4 | 4.7V |
| 5 | 5.0V |

IC312

| NO | DC(V) |
|---|---|
| 1 | 5.0V |
| 2 | 4.7V |
| 3 | 0V |
| 4 | 5.0V |
| 5 | 5.0V |

IC321

| NO | DC(V) |
|---|---|
| 1 | 5.0V |
| 2 | 5.0V |
| 3 | 5.0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 0V |
| 7 | 5.0V |
| 8 | 5.0V |

IC322

| NO | DC(V) |
|---|---|
| 1 | 5.0V |
| 2 | 5.0V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 5.0V |
| 7 | 0V |
| 8 | 5.0V |
| 9 | 0V |
| 10 | 0V |
| 11 | 0V |
| 12 | 5.0V |
| 13 | 5.0V |
| 14 | 5.0V |

IC371

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 1.5V |
| 3 | 0V |
| 4 | 1.4V |
| 5 | 3.2V |

IC372

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 1.4V |
| 3 | 0V |
| 4 | 1.6V |
| 5 | 3.2V |

IC374

| NO | DC(V) |
|---|---|
| 1 | 1.6V |
| 2 | 1.5V |
| 3 | 1.5V |
| 4 | 0V |
| 5 | 1.6V |
| 6 | 3.2V |
| 7 | 3.2V |
| 8 | 3.2V |

IC401

| NO | DC(V) | NO | DC(V) |
|---|---|---|---|
| 1 | 5.0V | 51 | 0.6V |
| 2 | 5.0V | 52 | 5.0V |
| 3 | 5.0V | 53 | 5.0V |
| 4 | 5.0V | 54 | 5.0V |
| 5 | 0V | 55 | 5.0V |
| 6 | 5.0V | 56 | 5.0V |
| 7 | 5.0V | 57 | 0V |
| 8 | 4.4V | 58 | 0V |
| 9 | 0V | 59 | 5.0V |
| 10 | 0V | 60 | 0V |
| 11 | 4.9V | 61 | 0V |
| 12 | 5.0V | 62 | 0V |
| 13 | ___ | 63 | 0V |
| 14 | ___ | 64 | 0V |
| 15 | ___ | 65 | 0V |
| 16 | ___ | 66 | 5.0V |
| 17 | 5.0V | 67 | 4.8V |
| 18 | 2.3V | 68 | ___ |
| 19 | 0V | 69 | ___ |
| 20 | 0V | 70 | 5.0V |
| 21 | 5.0V | 71 | 0V |
| 22 | 5.0V | 72 | 5.0V |
| 23 | 2.4V | 73 | 5.0V |
| 24 | 2.4V | 74 | 5.0V |
| 25 | 5.0V | 75 | 5.0V |
| 26 | 0V | 76 | 5.0V |
| 27 | ___ | 77 | 5.0V |
| 28 | 0V | 78 | 3.1V |
| 29 | ___ | 79 | 0V |
| 30 | ___ | 80 | 5.0V |
| 31 | 0V | 81 | 5.0V |
| 32 | ___ | 82 | 4.9V |
| 33 | 0V | 83 | 5.0V |
| 34 | 5.0V | 84 | 5.0V |
| 35 | 1.5V | 85 | 0V |
| 36 | 4.7V | 86 | 0V |
| 37 | 0.1V | 87 | 0V |
| 38 | 0.1V | 88 | 5.0V |
| 39 | 0V | 89 | 5.0V |
| 40 | 0V | 90 | 5.0V |
| 41 | 0V | 91 | 5.0V |
| 42 | 0V | 92 | 0V |
| 43 | 0V | 93 | 0.9V |
| 44 | 0V | 94 | 1.0V |
| 45 | 0V | 95 | 2.0V |
| 46 | 0V | 96 | 1.4V |
| 47 | 0V | 97 | 1.8V |
| 48 | 0V | 98 | 1.9V |
| 49 | 0V | 99 | 3.5V |
| 50 | 5.0V | 100 | 2.7V |

IC402

| NO | DC(V) |
|---|---|
| 1 | 5.0V |
| 2 | 0V |
| 3 | 3.9V |
| 4 | 1.5V |
| 5 | 3.0V |
| 6 | 2.7V |
| 7 | 2.2V |
| 8 | 2.2V |
| 9 | 2.4V |
| 10 | 2.5V |
| 11 | 2.4V |
| 12 | 0.7V |
| 13 | 0V |
| 14 | 2.0V |
| 15 | 1.7V |
| 16 | 0V |
| 17 | 0.7V |
| 18 | 0V |
| 19 | 2.0V |
| 20 | 0V |
| 21 | 0V |
| 22 | 0V |
| 23 | 5.0V |
| 24 | 2.0V |
| 25 | 0V |
| 26 | 2.4V |
| 27 | 0V |
| 28 | 2.9V |
| 29 | 0V |
| 30 | 2.7V |
| 31 | 2.2V |
| 32 | 0V |
| 33 | 0V |
| 34 | 0V |
| 35 | 3.4V |
| 36 | 0.7V |
| 37 | 0.7V |
| 38 | 4.4V |
| 39 | 1.1V |
| 40 | 4.0V |
| 41 | 3.4V |
| 42 | 3.6V |
| 43 | 0V |
| 44 | 0V |

IC403

| NO | DC(V) |
|---|---|
| 1 | 4.9V |
| 2 | 5.0V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 1.0V |
| 7 | 0V |
| 8 | 0V |

IC452

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 3.2V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 5.0V |
| 7 | 0V |
| 8 | 5.0V |

IC501

| NO | DC(V) | NO | DC(V) | NO | DC(V) | NO | DC(V) |
|---|---|---|---|---|---|---|---|
| 1 | 3.1V | 53 | 0.7V | 105 | 0V | 157 | 0.9V |
| 2 | 1.7V | 54 | 0.7V | 106 | 0V | 158 | 0.9V |
| 3 | 0.7V | 55 | 3.1V | 107 | 3.1V | 159 | 0V |
| 4 | 2.0V | 56 | 0.6V | 108 | 0V | 160 | 3.1V |
| 5 | 3.1V | 57 | 0V | 109 | 0V | 161 | 0V |
| 6 | 1.6V | 58 | 0.6V | 110 | 0V | 162 | 0V |
| 7 | 0V | 59 | 0.5V | 111 | 0V | 163 | 0V |
| 8 | 0V | 60 | 0.5V | 112 | 0V | 164 | 0V |
| 9 | 2.4V | 61 | 3.1V | 113 | 3.1V | 165 | 0V |
| 10 | 2.9V | 62 | 0.6V | 114 | 0V | 166 | 0V |
| 11 | 2.6V | 63 | 0V | 115 | 0V | 167 | 0V |
| 12 | 3.1V | 64 | 0.6V | 116 | 0V | 168 | 3.1V |
| 13 | 5.0V | 65 | 3.1V | 117 | 3.1V | 169 | 0.9V |
| 14 | 0V | 66 | 0.7V | 118 | 0V | 170 | 0V |
| 15 | 5.0V | 67 | 0V | 119 | 0V | 171 | 0V |
| 16 | 3.1V | 68 | 0.7V | 120 | 0V | 172 | 1.6V |
| 17 | 3.1V | 69 | 3.1V | 121 | 0V | 173 | 1.6V |
| 18 | 3.1V | 70 | 0.6V | 122 | 0V | 174 | 3.1V |
| 19 | 0V | 71 | 0V | 123 | 3.1V | 175 | 3.1V |
| 20 | 3.1V | 72 | 0.7V | 124 | 0V | 176 | 3.1V |
| 21 | 3.1V | 73 | 0.7V | 125 | 0V | 177 | 1.6V |
| 22 | 3.1V | 74 | 0.6V | 126 | 0V | 178 | 3.1V |
| 23 | 3.1V | 75 | 3.1V | 127 | 0V | 179 | 0V |
| 24 | 3.1V | 76 | 0.7V | 128 | 0.8V | 180 | 5.0V |
| 25 | 3.1V | 77 | 0V | 129 | 3.1V | 181 | 3.1V |
| 26 | 3.1V | 78 | 0.8V | 130 | 3.1V | 182 | 5.0V |
| 27 | 3.1V | 79 | 3.2V | 131 | 0V | 183 | 0V |
| 28 | 3.1V | 80 | 3.2V | 132 | 0.8V | 184 | 5.0V |
| 29 | 0V | 81 | 3.1V | 133 | 3.1V | 185 | 5.0V |
| 30 | 3.1V | 82 | 3.2V | 134 | 3.1V | 186 | 5.0V |
| 31 | 0V | 83 | 0V | 135 | 0.8V | 187 | 5.0V |
| 32 | 0V | 84 | 0V | 136 | 0V | 188 | 5.0V |
| 33 | 0V | 85 | 3.2V | 137 | 0.8V | 189 | 5.0V |
| 34 | 0V | 86 | 0V | 138 | 3.1V | 190 | 3.1V |
| 35 | 3.1V | 87 | 3.1V | 139 | 0.8V | 191 | 3.1V |
| 36 | 3.1V | 88 | 0V | 140 | 0.8V | 192 | 2.6V |
| 37 | 0V | 89 | 0V | 141 | 3.1V | 193 | 3.1V |
| 38 | 0V | 90 | 3.1V | 142 | 0.9V | 194 | 0V |
| 39 | 0V | 91 | 3.1V | 143 | 0.9V | 195 | 0V |
| 40 | 3.1V | 92 | 3.1V | 144 | 3.1V | 196 | 0V |
| 41 | 3.1V | 93 | 0V | 145 | 0.9V | 197 | 3.1V |
| 42 | 0V | 94 | 3.1V | 146 | 0V | 198 | 5.0V |
| 43 | 3.1V | 95 | 3.1V | 147 | 3.1V | 199 | 0V |
| 44 | 0V | 96 | 0V | 148 | 0.9V | 200 | 0V |
| 45 | 3.1V | 97 | 0V | 149 | 3.1V | 201 | 3.1V |
| 46 | 3.1V | 98 | 0V | 150 | 0.9V | 202 | 2.2V |
| 47 | 0V | 99 | 0V | 151 | 0V | 203 | 2.4V |
| 48 | 3.1V | 100 | 0V | 152 | 0.9V | 204 | 2.5V |
| 49 | 0V | 101 | 3.1V | 153 | 3.1V | 205 | 3.1V |
| 50 | 3.1V | 102 | 0V | 154 | 0.9V | 206 | 5.0V |
| 51 | 0V | 103 | 0V | 155 | 0.9V | 207 | 5.0V |
| 52 | 3.1V | 104 | 0V | 156 | 3.1V | 208 | 2.0V |

IC502

| NO | DC(V) |
|---|---|
| 1 | 3.1V |
| 2 | 0V |
| 3 | 1.6V |
| 4 | 3.2V |

IC503

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 0V |
| 3 | 3.2V |
| 4 | 3.2V |
| 5 | 1.6V |
| 6 | 1.6V |
| 7 | 0V |
| 8 | 1.6V |
| 9 | 1.6V |
| 10 | 3.2V |
| 11 | 3.2V |
| 12 | 3.2V |
| 13 | 0V |
| 14 | 3.2V |

IC504

| NO | DC(V) |
|---|---|
| 1 | 3.2V |
| 2 | 0V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 0.3V |
| 7 | 3.2V |
| 8 | 0V |
| 9 | 0V |
| 10 | 0V |
| 11 | 0V |
| 12 | 0V |
| 13 | 3.2V |
| 14 | 0V |
| 15 | 3.1V |
| 16 | 3.1V |
| 17 | 3.1V |
| 18 | 2.3V |
| 19 | 0V |
| 20 | 0V |
| 21 | 0V |
| 22 | 3.1V |
| 23 | 3.1V |
| 24 | 0V |
| 25 | 3.2V |
| 26 | 0V |
| 27 | 3.1V |
| 28 | 0V |
| 29 | 3.1V |
| 30 | 0V |
| 31 | 3.1V |
| 32 | 0V |
| 33 | 0V |
| 34 | 3.2V |
| 35 | 1.7V |
| 36 | 0V |
| 37 | 0V |
| 38 | 3.2V |
| 39 | 0V |
| 40 | 0V |
| 41 | 0V |
| 42 | 0V |
| 43 | 0V |
| 44 | 3.2V |
| 45 | 0V |
| 46 | 0V |
| 47 | 0V |
| 48 | 0V |
| 49 | 0V |
| 50 | 0V |

IC505

| NO | DC(V) |
|---|---|
| 1 | 3.2V |
| 2 | 0V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 0.3V |
| 7 | 3.2V |
| 8 | 0V |
| 9 | 0V |
| 10 | 0V |
| 11 | 0V |
| 12 | 0V |
| 13 | 3.2V |
| 14 | 0V |
| 15 | 3.1V |
| 16 | 3.1V |
| 17 | 3.1V |
| 18 | 2.3V |
| 19 | 0V |
| 20 | 0V |
| 21 | 0V |
| 22 | 3.1V |
| 23 | 3.1V |
| 24 | 0V |
| 25 | 3.2V |
| 26 | 0V |
| 27 | 3.1V |
| 28 | 0V |
| 29 | 3.1V |
| 30 | 0V |
| 31 | 3.1V |
| 32 | 0V |
| 33 | 0V |
| 34 | 3.2V |
| 35 | 1.7V |
| 36 | 0V |
| 37 | 0V |
| 38 | 3.2V |
| 39 | 0V |
| 40 | 0V |
| 41 | 0V |
| 42 | 0V |
| 43 | 0V |
| 44 | 3.2V |
| 45 | 0V |
| 46 | 0V |
| 47 | 0V |
| 48 | 0V |
| 49 | 0V |
| 50 | 0V |

IC551

| NO | DC(V) | NO | DC(V) |
|---|---|---|---|
| 1 | 0V | 51 | 0V |
| 2 | 0V | 52 | 5.0V |
| 3 | 0V | 53 | 0V |
| 4 | 0V | 54 | 0V |
| 5 | 1.7V | 55 | 0V |
| 6 | 0V | 56 | 0V |
| 7 | 0V | 57 | 0V |
| 8 | 1.7V | 58 | 0V |
| 9 | 1.7V | 59 | 0V |
| 10 | 2.7V | 60 | 0V |
| 11 | 3.1V | 61 | 0V |
| 12 | 5.0V | 62 | 5.0V |
| 13 | 2.3V | 63 | 4.4V |
| 14 | 4.6V | 64 | 4.4V |
| 15 | 5.0V | 65 | 4.4V |
| 16 | 0V | 66 | 4.4V |
| 17 | 0V | 67 | 4.4V |
| 18 | 0V | 68 | 4.4V |
| 19 | 0V | 69 | 4.4V |
| 20 | 2.3V | 70 | 4.4V |
| 21 | 0V | 71 | 0V |
| 22 | 0V | 72 | 4.8V |
| 23 | 2.3V | 73 | 0.7V |
| 24 | 0V | 74 | 0.7V |
| 25 | 5.0V | 75 | 0V |
| 26 | 0V | 76 | 0.7V |
| 27 | 0V | 77 | 0V |
| 28 | 0V | 78 | 0V |
| 29 | 0V | 79 | 0V |
| 30 | 0V | 80 | 0V |
| 31 | 5.0V | 81 | 0V |
| 32 | 5.0V | 82 | 0V |
| 33 | 5.0V | 83 | 5.0V |
| 34 | 2.5V | 84 | 0V |
| 35 | 0V | 85 | 0.5V |
| 36 | 0V | 86 | 0V |
| 37 | 5.0V | 87 | 0V |
| 38 | 5.0V | 88 | 0.3V |
| 39 | 5.0V | 89 | 0.3V |
| 40 | 0V | 90 | 0.3V |
| 41 | 0V | 91 | 0.3V |
| 42 | 0V | 92 | 0.3V |
| 43 | 0V | 93 | 0.3V |
| 44 | 0V | 94 | 0V |
| 45 | 0V | 95 | 0V |
| 46 | 0V | 96 | 4.9V |
| 47 | 0V | 97 | 4.9V |
| 48 | 2.2V | 98 | 4.9V |
| 49 | 2.3V | 99 | 5.0V |
| 50 | 5.0V | 100 | 5.0V |

IC552

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 0V |
| 3 | 0V |
| 4 | 0V |
| 5 | 0V |
| 6 | 0V |
| 7 | 0V |
| 8 | 0V |
| 9 | 0V |
| 10 | 5.0V |
| 11 | 0V |
| 12 | 0V |
| 13 | 0V |
| 14 | 0V |
| 15 | 5.0V |
| 16 | 0V |
| 17 | 0V |
| 18 | 0V |
| 19 | 5.0V |
| 20 | 2.2V |
| 21 | 5.0V |
| 22 | 0V |
| 23 | 0V |
| 24 | 5.0V |
| 25 | 0V |
| 26 | 0V |
| 27 | 0V |
| 28 | 0V |

IC553

| NO | DC(V) |
|---|---|
| 1 | 5.0V |
| 2 | 0.7V |
| 3 | 0.7V |
| 4 | 0.5V |
| 5 | 0V |
| 6 | 0V |
| 7 | 0.3V |
| 8 | 0.3V |
| 9 | 0.3V |
| 10 | 0.3V |
| 11 | 0.3V |
| 12 | 0V |
| 13 | 0V |
| 14 | 4.6V |
| 15 | 4.4V |
| 16 | 0V |
| 17 | 4.4V |
| 18 | 0V |
| 19 | 4.4V |
| 20 | 0V |
| 21 | 4.4V |
| 22 | 0V |
| 23 | 5.0V |
| 24 | 4.4V |
| 25 | 0V |
| 26 | 4.4V |
| 27 | 0V |
| 28 | 4.4V |
| 29 | 0V |
| 30 | 4.4V |
| 31 | 0.3V |
| 32 | 0V |
| 33 | 0V |
| 34 | 0V |
| 35 | 0.7V |
| 36 | 0V |
| 37 | 0V |
| 38 | 0V |
| 39 | 0V |
| 40 | 0V |
| 41 | 0V |
| 42 | 0V |
| 43 | 0V |
| 44 | 0V |

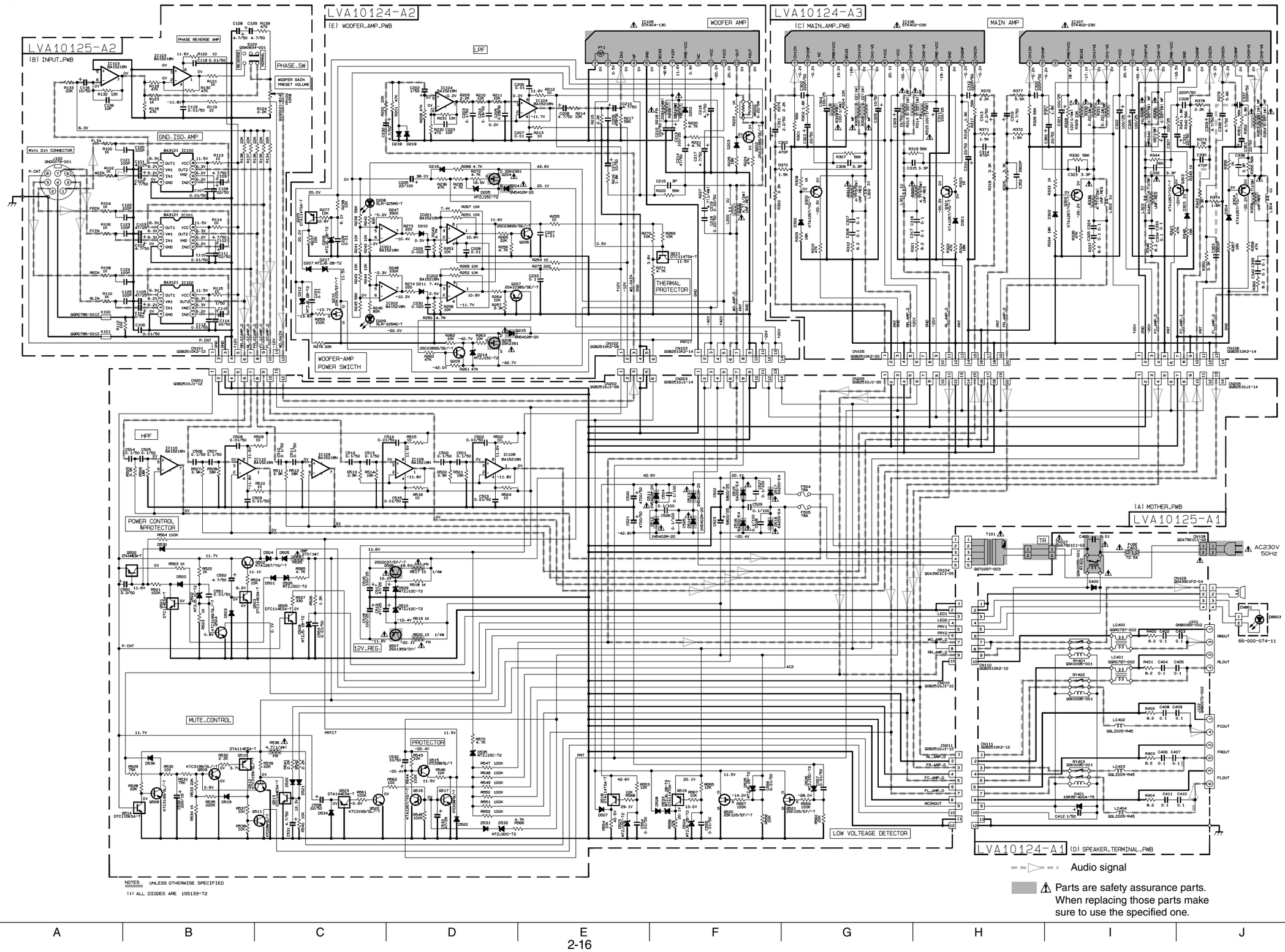
IC554

| NO | DC(V) | NO | DC(V) |
|---|---|---|---|
| 1 | 0V | 51 | 0V |
| 2 | 0V | 52 | 0V |
| 3 | 5.1V | 53 | 0V |
| 4 | 0V | 54 | 0V |
| 5 | 0V | 55 | 0V |
| 6 | 5.1V | 56 | 0V |
| 7 | 0V | 57 | 0.6V |
| 8 | 0V | 58 | 0V |
| 9 | 5.1V | 59 | 0V |
| 10 | 0V | 60 | 0V |
| 11 | 0V | 61 | 0V |
| 12 | 2.5V | 62 | 0V |
| 13 | 5.1V | 63 | 5.1V |
| 14 | 2.5V | 64 | 0V |
| 15 | 2.5V | 65 | |
| 16 | 0V | 66 | |
| 17 | 0.9V | 67 | |
| 18 | 0V | 68 | |
| 19 | 5.1V | 69 | |
| 20 | 0.4V | 70 | |
| 21 | 0V | 71 | |
| 22 | 5.1V | 72 | |
| 23 | 0.9V | 73 | |
| 24 | 0V | 74 | |
| 25 | | 75 | |
| 26 | 0V | 76 | |
| 27 | 0V | 77 | |
| 28 | 0V | 78 | |
| 29 | 1.3V | 79 | |
| 30 | 1.3V | 80 | |
| 31 | 0V | 81 | |
| 32 | 0V | 82 | |
| 33 | 0.9V | 83 | |
| 34 | 1.3V | 84 | |
| 35 | 2.1V | 85 | |
| 36 | 1.3V | 86 | |
| 37 | 0.6V | 87 | |
| 38 | 0V | 88 | |
| 39 | 0V | 89 | |
| 40 | 0V | 90 | |
| 41 | 0V | 91 | |
| 42 | 0V | 92 | |
| 43 | 0V | 93 | |
| 44 | 0V | 94 | |
| 45 | 0V | 95 | |
| 46 | 0V | 96 | |
| 47 | 0V | 97 | |
| 48 | 0V | 98 | |
| 49 | 1.3V | 99 | |
| 50 | 1.3V | 100 | |

IC555

| NO | DC(V) |
|---|---|
| 1 | 0V |
| 2 | 2.5V |
| 3 | 2.5V |
| 4 | 5.0V |
| 5 | 0V |
| 6 | 2.5V |
| 7 | 2.5V |
| 8 | 0V |

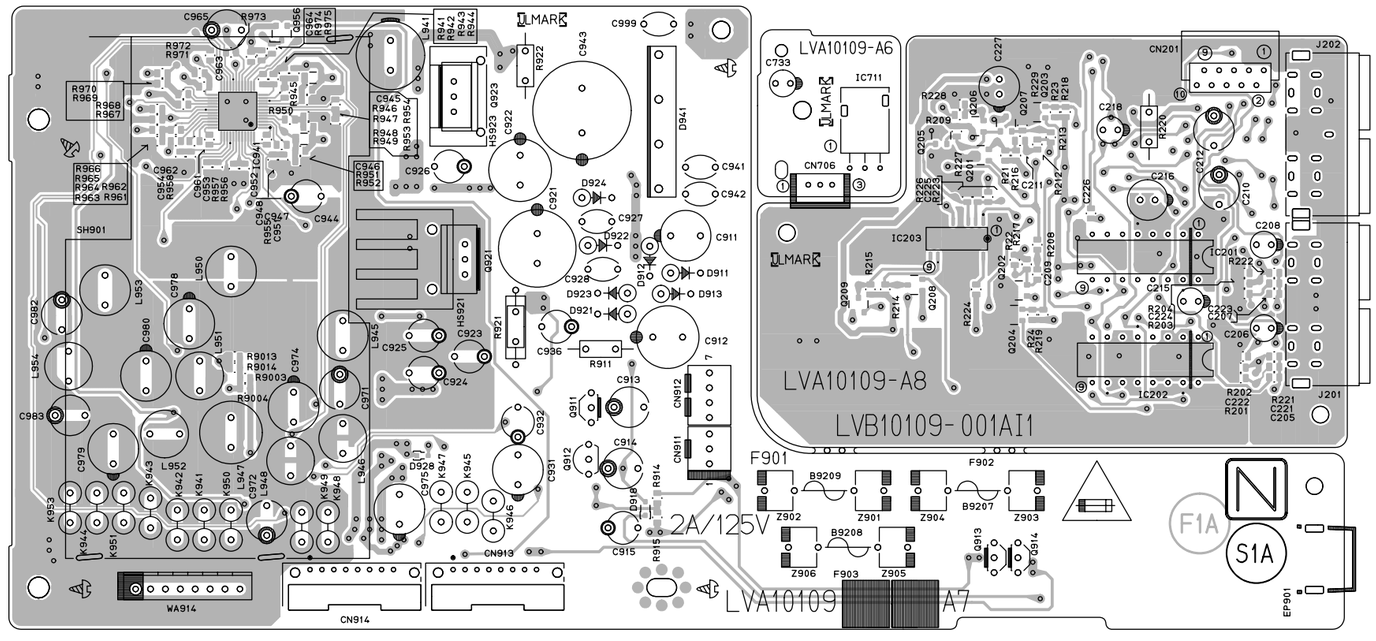
## ■ Powered subwoofer section



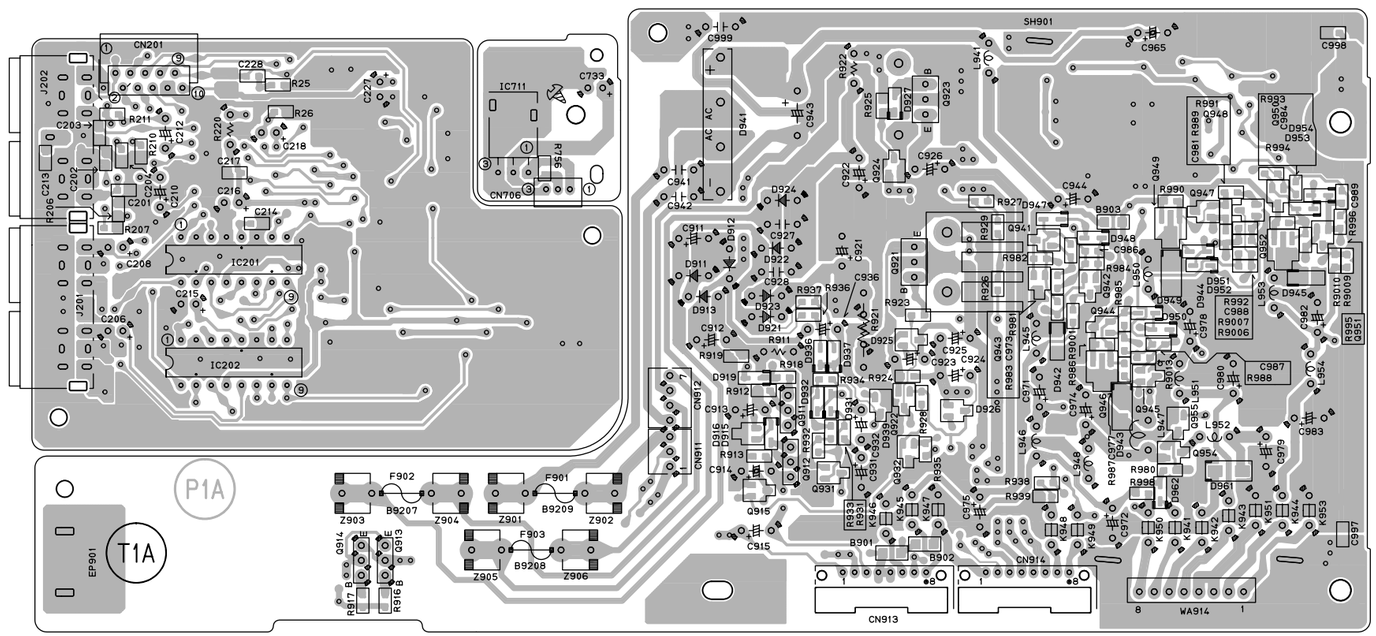
# Printed circuit boards

## ■ Power supply board

**(Surface side view)**

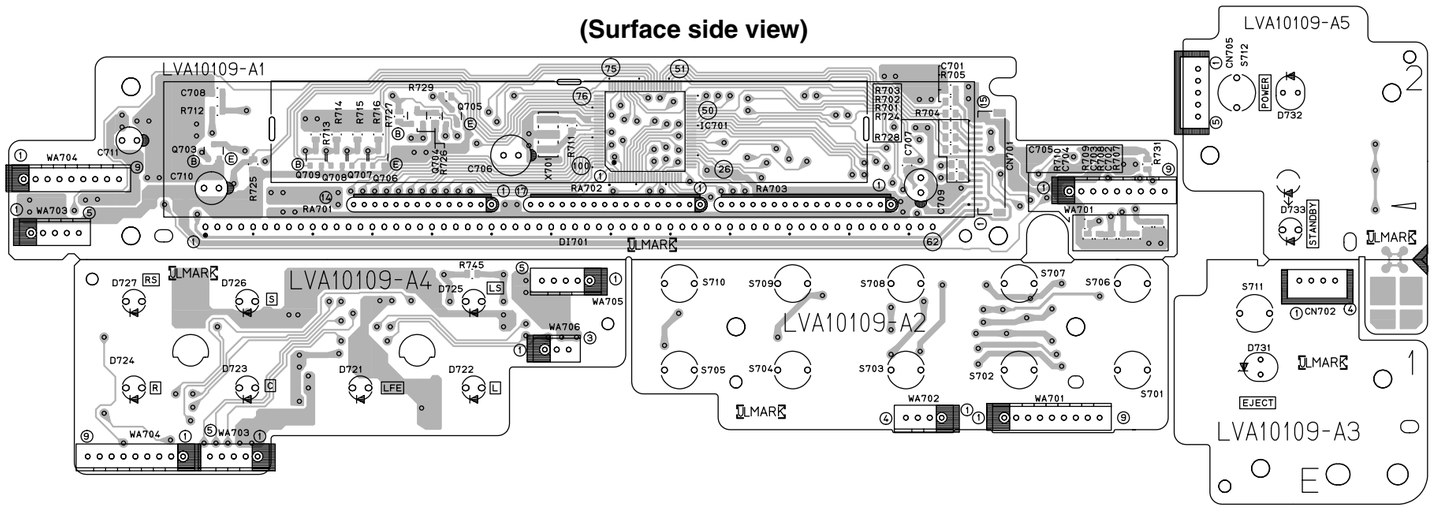



**(Bottom side view)**

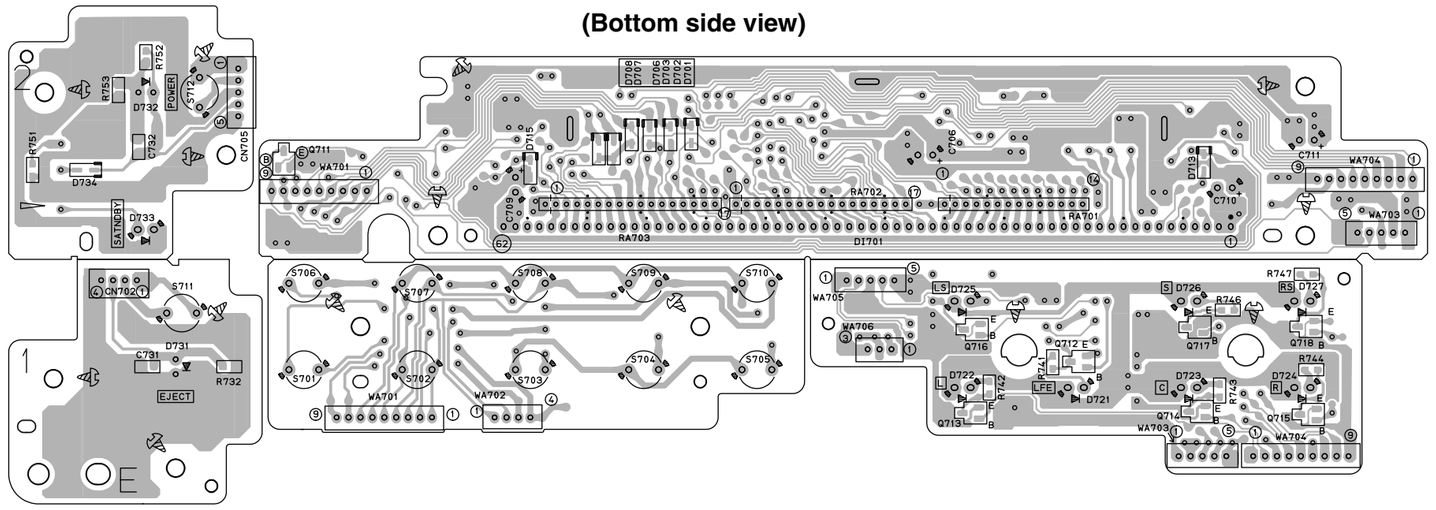


## ■ Front panel board

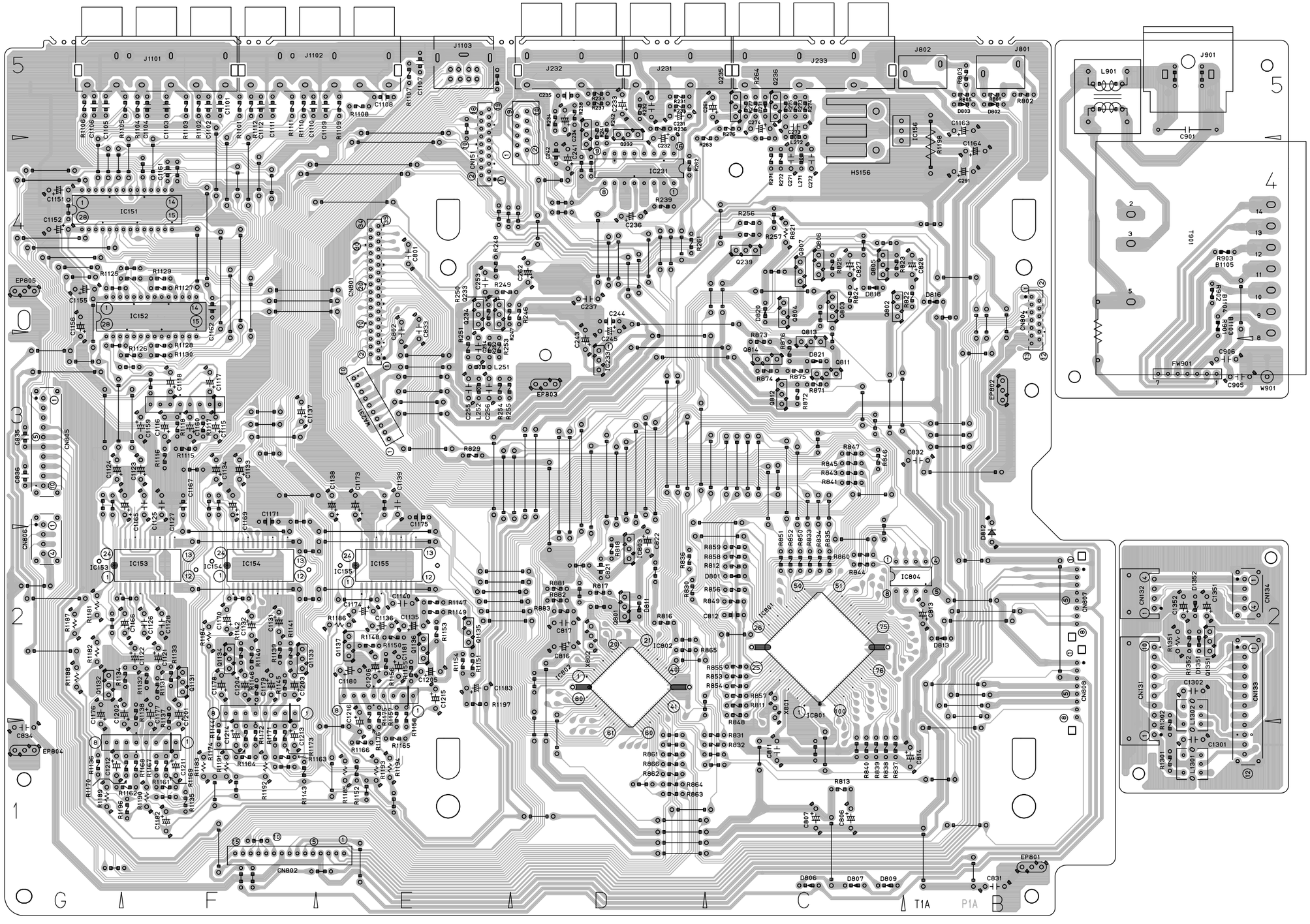
**(Surface side view)**




**(Bottom side view)**

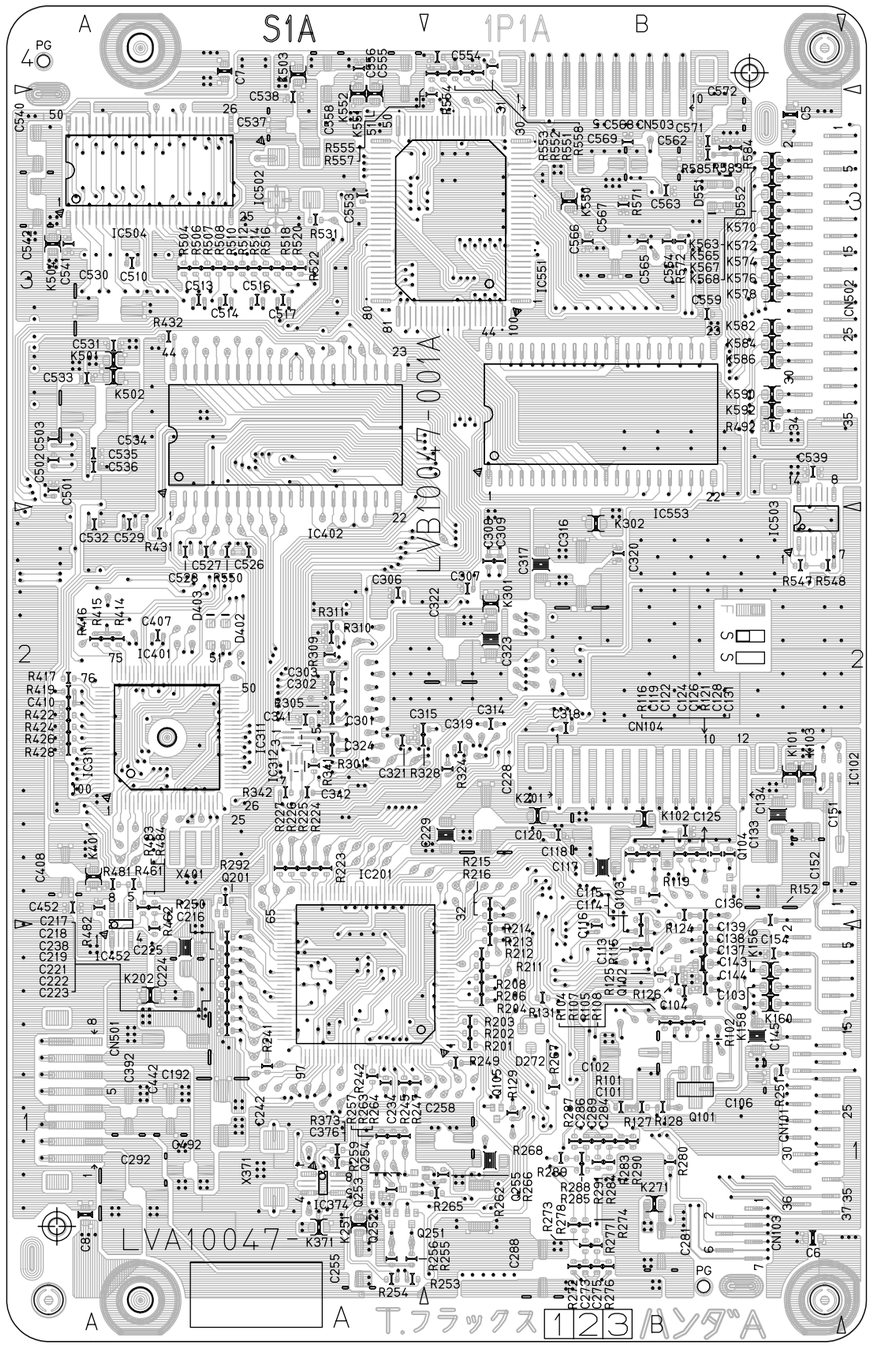


## ■ Audio/Video board

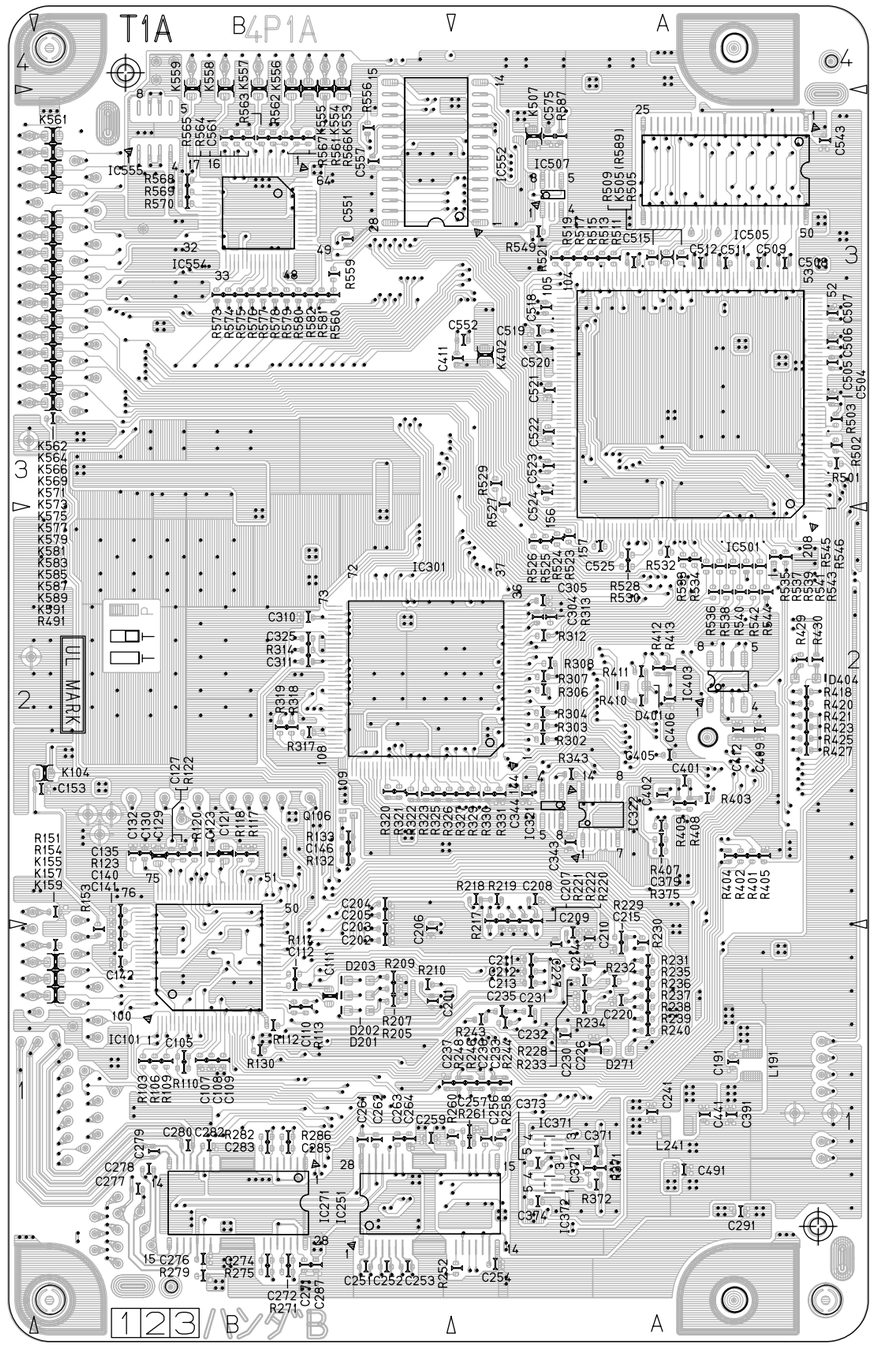


## ■ Main board

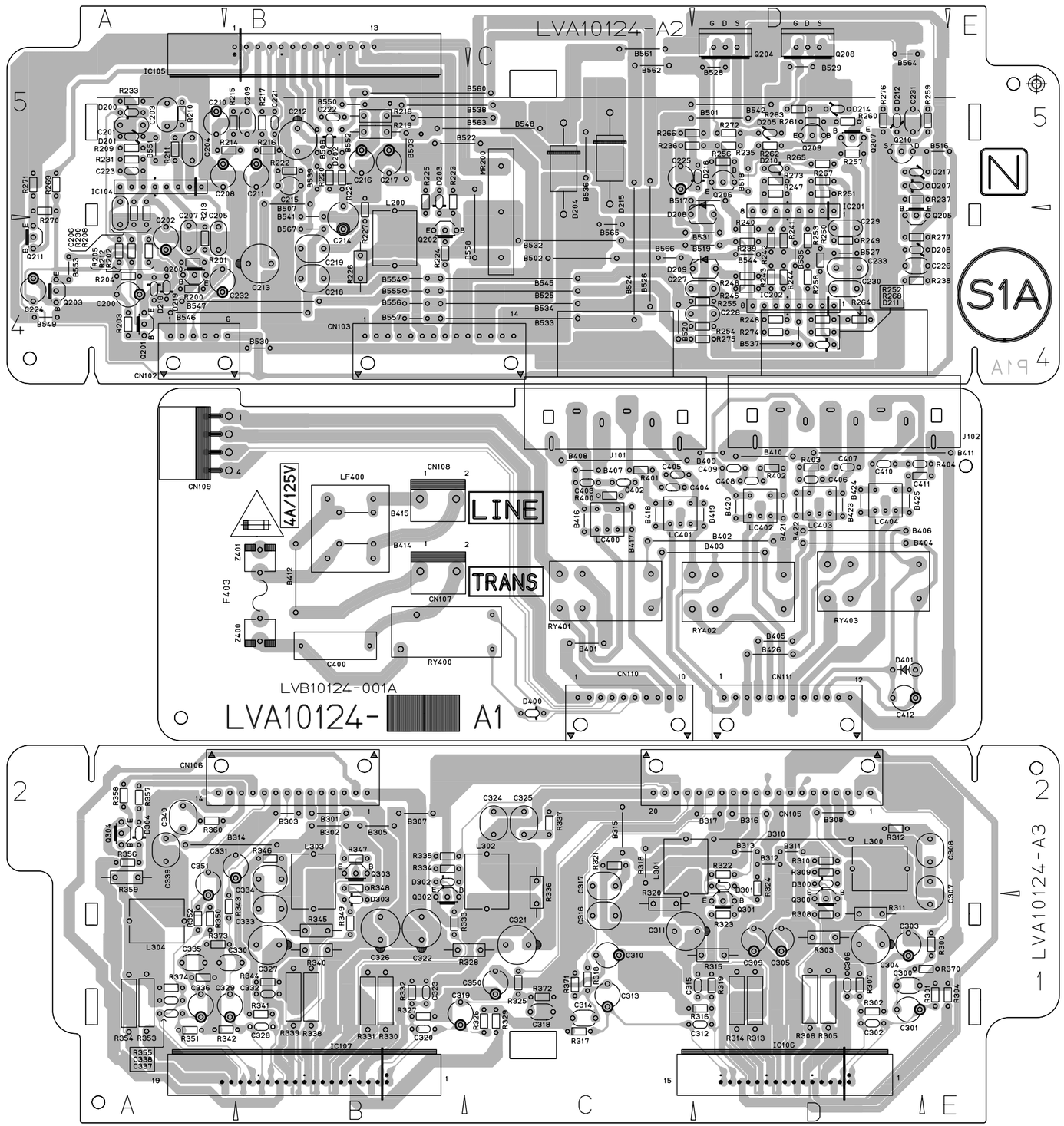
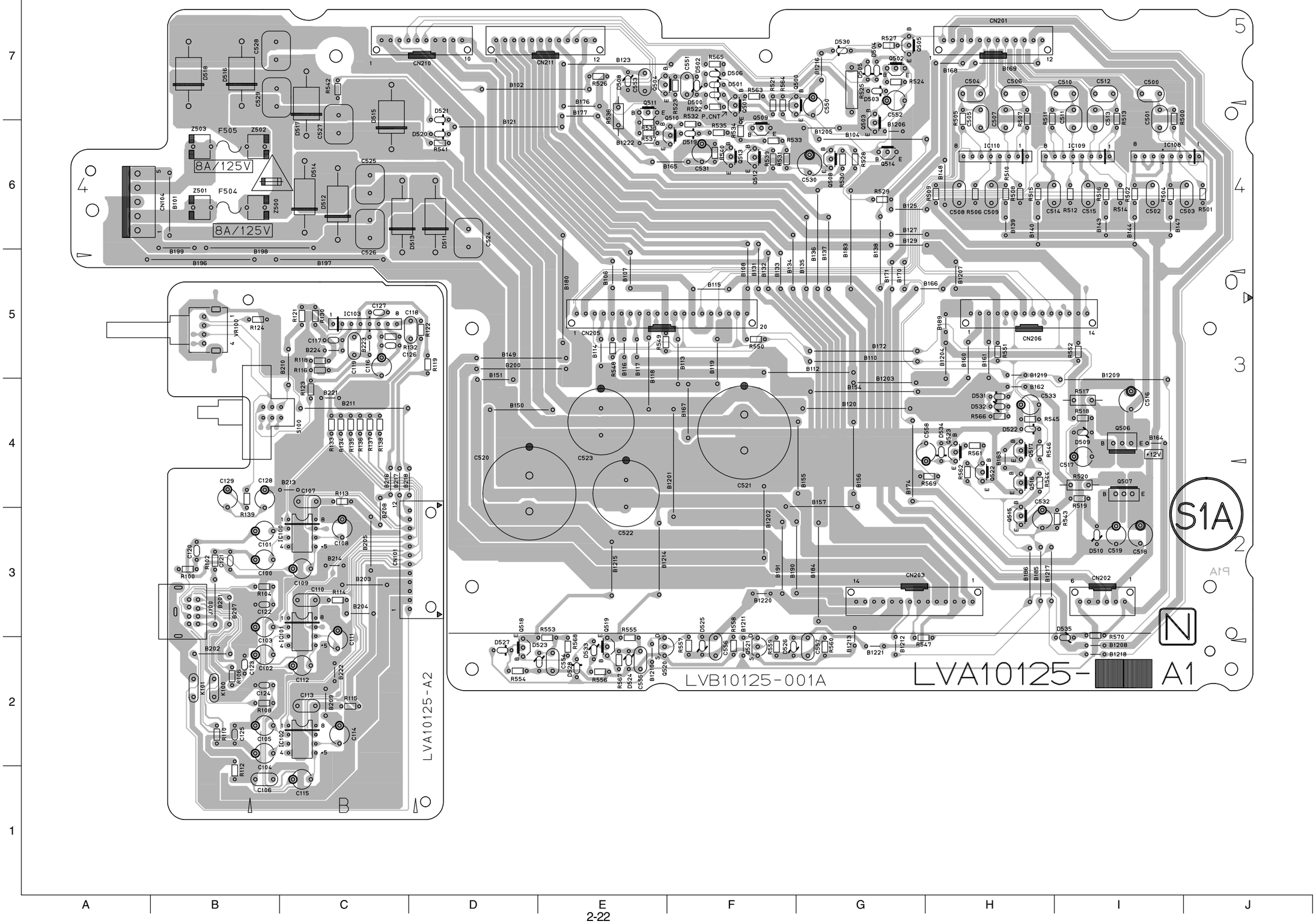
**(Surface side view)**




**(Bottom side view)**



## ■ Powered subwoofer board (SP-PWA10) 1/2



## ■ Powered subwoofer board (SP-PWA10) 2/2